CENTRAL PATENTS INDEX

CLASSIFIED ALERTING BULLETIN

Section D:

FOOD
DETERGENTS

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ABSTRACTS

INDEXES

II - PATENTEE

V - BASIC NUMBER

VII - PATENT NUMBER

COUNTRY	PUB DATE(S)	NUMBER RANGE
BELGIUM		
-Delayed	18 DEC - 28 DEC 80	883,877 - 883,986
-Non Delayed	16 DEC 80	884,905 - 885,007
BRAZIL	23 DEC 80	7,903,552 - 8,003,154
CANADA	16 DEC 80	1,091,401 - 1,091,850
DENMARK	15 DEC 80	7,901,964 - 8,003,878
W. GERMANY		
-DAS	8 JAN 81	1,622,255 - 3,016,446
-OLS	8 JAN 81	2,857,559 - 3,025,474
EUROPE		
-Unexamined	7 JAN81	20,321 - 20,763
		21,449 - 22,133
FRANCE*	17 OCT 80	2,451,699 - 2,452,231
	(BOPI 21 NOV 80)	
UNITED KINGDOM	14 JAN 81	1,582,551 - 1,582,940
		2,050,781 - 2,051,530
HUNGARY	27 DEC 80	H002,582 - H002,587
		T019,186 - T019,339
JAPAN		
-Unexamined	—	47,010,743 - 54,089,362
	11 NOV - 14 NOV 80	55,144,201 - 55,146,600
-Examined	11 DEC - 18 DEC 80	80,049,241 - 80,050,600
NETHERLANDS	15 DEC 80	165,633 - 165,906
	15 DEC - 21 DEC 80	7,904,550 - 8,003,493
NORWAY	15 DEC 80	7,901,607 - 8,003,207
RES. DISCLOSURE	DECEMBER 80	200,001 - 200,051
SWEDEN	15 DEC 80	7,813,096 - 8,007,876
SOVIET UNION	—	732,367 - 735,178
UNITED STATES		
-Reissues	30 DEC 80	Re30,461 - Re30,468
-Patents	30 DEC 80	4,241,457 - 4,242,756

*Printed patents actually published mid November - late November, 1980

Arrangement of Abstracts

See Appendix I for definition of 'Major' and 'Minor' Countries.

'MAJOR' COUNTRIES – An alerting abtract of every basic and examined equivalent document is provided except for equivalents from Canada, East Germany, Sweden and Switzerland. The abstracts are arranged in CPI class order and within any one of the 135 classes are in country and patent number order.

'MINOR' COUNTRIES – Basic headings are included in sequence with the entries from the 'Major' countries.

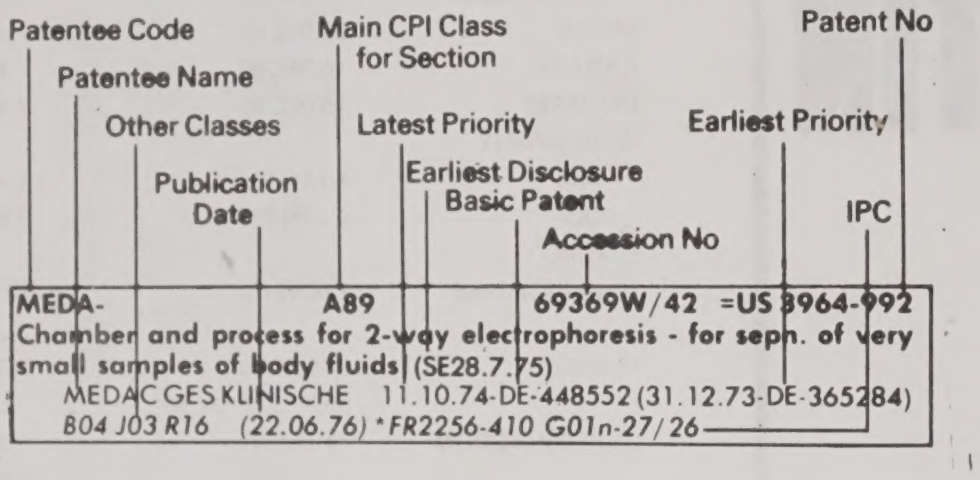
CPI Section Headings

See inside cover for further details.

A	Polymer Chemistry	F	Textiles, Paper, Cellulose
AE	Polymer & General Chemistry	G	Printing, Coating, Photographic Chemistry
A+	Polymer Applns.	H	Petroleum
B	Pharmaceuticals	J	Chemical Engineering
C	Agricultural Chemistry	K	Nucleonics. Explosives, Protection
D	Food, Disinfectants, Detergents	L	Refractories, Ceramics
E	General Chemistry	M	Metallurgy
E+	General Chemistry Applns.		

Typical Abstract Heading

See CPI/WPI Instruction Manual No. 1A for explanation of the various flagged descriptors.



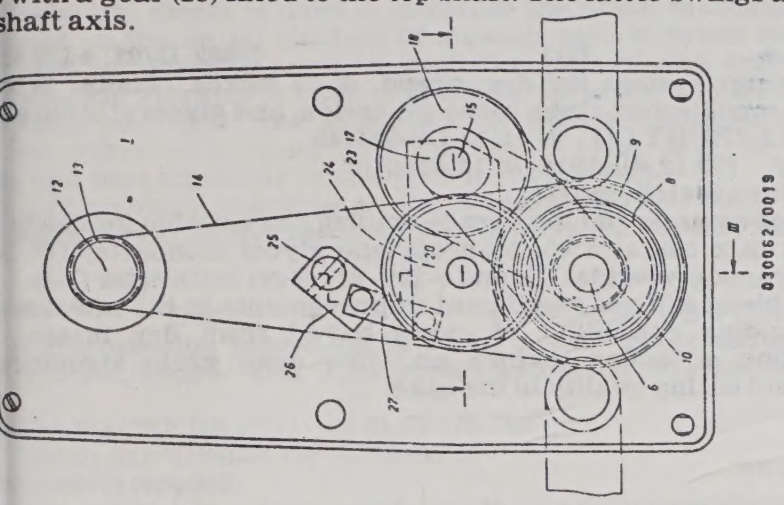
Copies of Specifications may be ordered from our PATENTS SUPPLY DIVISION.

Information Servi
6 APR 1981
C.F.T.R.I., MYSORE

D1: FOOD; FERMENTATION

D11 : BAKING

★ D11 02074 D/03 ★DE 2922-702
rolling machine - has multiple transmission sprocket rotating n bottom roller shaft and driven by motor
WER MASCH AG 05.06.79-DE-922702
(08.01.81) F16h-01/22
as 922702 (10pp160)
ugh-rolling machine has a bottom roller on a shaft in fixed gs and a top roller on one in pivoting bearings, and a driving above both. A freely-rotating multiple transmission sprocket rns on the bottom shaft (6), its single main wheel being driven sprocket (13) fixed to the motor shaft (12), while its ission sprocket drives the central wheel of a multiple ission sprocket (17) idling on a layshaft (15).
ront wheel of the latter sprocket drives a single sprocket (8) the forward end of the bottom shaft, while its rear pinion with a gear (23) fixed to the top shaft. The latter swings about shaft axis.



★ D11 02170 D/03 ★DE 2926-264
g oven charging carriage - with rollers and swivelling ures on crossbars
LIAN T 29.06.79-DE-926264
01.81) A21b-03/07
9 as 926264 (6pp39)
ing carriage for bakeries to insert bread and rolls into eck baking ovens is a frame made of round or square tubes, ith two fixed and two swivelling wheels. Some of the fixed ars on the operator's side are fitted with rollers. The ars at the oven side are combined by a square structure in each hinged in the centre at one side so that they can be turned rd through an angle of 35 deg.
new carriage saves time and speeds up the oven charging ion.

D11 81470 W/50 =DS 2434-344
ng device for projecting a liq. - onto recipients in a risation tunnel
LSTEIN & KAPPERT MASC 17.07.74-DE-434344
*P42 +Q39 (08.01.81) *BE-831-155 A23l-03/02 B05b-01/14 05b-13/02*
4 as 434344 (4pp39)
l pasteurising plant through which bottles of beverages are continuously is fitted with several parallel spray tubes across ith through which the spray fluid is ejected on the bottle. Each gular tube has at the bottom cut-outs at a regular distance, ne flap bent up to create eddies as the fluid approaches the g.
tubes are waisted between the cut-outs to equalise the re distribution. Each tube has a slot at the end to blow out any ent. This keeps the tubes and cut-outs free from clogging and es a uniform flow rate.(DS)

:- D11 27222 C/15 =EP --20-408
mixing for farinaceous foodstuff prodn. - effected under g with specified energy input and input time
EEDY OF BURNLEY 16.09.78-GB-037092 (16.09.78-GB-091)
*01.81) *WP8000-524 A21c-01/14 A21d-06*
9 as 901141 E(AT CH DE FR LU NL SE)
00524)

BIAL- ★ D11 02657 D/03 ★EP --22-090
Domestic pasta machine with mixer and extruder - having safety interlock on lid
BIALETTI R & C SPA 07.06.79-IT-023335
P28 (07.01.81) A21c-01/06 A21c-11/20 A47j-43/04
06.06.80 as 830034 (30pp295) (E) NO-CITNS. E(AT BE CH DE FR GB LI LU NL SE)
A pasta machine comprises a mixing chamber located above an extruder in a removable portion of the apparatus. The drive shafts of the mixer and extruder are splined and engage a gearbox mounted within the machine base. The removable portion includes a sliding gate which blocks the flow of pasta from the mixer to the extruder when the removable portion is separated from the base. The lid of the mixer includes an interlock which prevents the lid from being opened when the removable portion is coupled to the base..
The machine prepares pasta for domestic use. The mixing chamber and extruder are removable for cleaning. The mixing chamber can be loaded with dry ingredients when removed but when connected to the base the lid remains closed to prevent access to the mixing paddles.

PALO/ ★ D11 02675 D/03 ★FR 2451-714
Carrier to load oven with dough pieces from prover - has endless band with transverse bar fixed with pressure-sensitive, textile friction bonding material
PALOMBA J 20.03.79-FR-007478
(21.11.80) A21b-03/07
20.03.79 as 007478 (8pp448)
The carrier comprises a rectangular frame housing two parallel end rollers around which an endless band is fitted to support dough pieces on its upper run. The band is now fitted with a removable, transverse bar which extends right across the band and projects, at right angles, beyond each side edge of the band. For fixing the bar to the band, the two contact surfaces are each fitted with a layer of velcro (RTM), i.e. a pressure-sensitive, textile friction bonding material.
The band is positioned with the bar near one end of its top run, the remainder of which is loaded with dough pieces. The carrier is inserted into an oven on top of a shelf, leaving the bar just outside the oven door. The bar projections drop into channels on each side of the oven door. The carrier frame is pulled out of the oven, the band retreating with the front roller to leave the dough pieces on the oven shelf. The projections are disengaged from the channels.
The carrier band can be loaded with dough pieces and placed in a proving chamber.

SHIR- ★ D11 03175 D/03 ★J8 0049-814
Quick boiling dried noodle prepn. - from starch, skim-milk and flour
SHIROMUGIMAI KK 09.12.77-JP-147055
(15.12.80) A23l-01/16
09.12.77 as 147055 (5pp22)
In the prepn. of dried noodles (I), starch and skim-milk are added to the starting material, flour.
(I) can be boiled for a shorter time. (J54080444).

KAZG = ★ D11 03260 D/03 ★SU -732-378
Pressed baker's yeast activation for bread-making - by incubation with nutrient contg. lactic flora bacterial culture and yeast lysate
KAZGIPROPISHCHEPROM 12.05.77-SU-488289
(D16) (05.05.80) C12c-11/26
12.05.77 as 488289 (3pp938)
Pressed Baker's yeast is activated prior to mixing it with dough by comminuting it with nutrient medium contg. lactic flora bacteria and yeast hydrolysate and holding the resulting suspension in a warm place for a specified period.The lactic flora bacterial culture is prepd. by culturing mesophilic bacteria at 35-37 deg. C for 12-16 hrs. in an aq. flour suspension contg. 2 pts. water per 1 pt. flour with addn. of yeast lysate until 23-25 deg. H acidity is obtd.The yeast lysate is obtd. by heating 40-50% suspension of yeast in lactic fluora bacterial culture at 70-80 deg. C for 30-40 min.
The activity of Baker's yeast is increased and the activation period is reduced(to30 min) if the yeast is activated in a nutrient contg. mesophilic bacterial:yeast ratio of 1:1-3:1. Bul.17/5.5.80.

MOFA = ★ D11 03308 D/03 ★SU -733-602
Grease for moulds and sheets used in food industry - contg. vegetable oil, hydrogenated fat, acetone derivs. of mono:glyceride and phosphate concentrate
MOSC FATS RES INST(CHER =) 12.04.77-SU-477259
(15.05.80) A21d-08/08
12.04.77 as 477259 (3pp70)
High quality grease for moulds and sheets, used in mfr. of farinaceous confectionery, etc., contains (in wt.%) vegetable oil 37-41, a hydrogenated fat 40-44, acetone derivs. of monoglycerides 10-12, and a phosphate concentrate (I) 7-9. The mould coating prevents sticking of prod. to mould surface, producing glossy surface prods. The addn. of (I) improves the stability of compsn. and reduces the mfg. cost

VOTE = ★ D11 03314 D/03 ★SU -733-624
Bread kvass microbiological prodn. - includes fermenting diluted malt extract with baker's yeast and lactic flora bacteria
VORON TECH INST 09.11.77-SU-541371
(D16) (20.05.80) A23l-02/38 C12g-03/02
09.11.77 as 541371 (3pp938)
Prodn. of bread kvass includes culturing baker's yeast and lactic flora bacteria in wort with addn. of sugar syrup.
The fermentation of maltose-based wort concentrate is improved by diluting the malt concentrate with water followed by addn. of Baker's yeast culture with alpha-glucosidase activity in amts. 0.10-0.20 kg. per 100 decagrams wort. The sugar content is supplimented by addn. of barley or maize malt extract using 29.4-30.0 or 37.5-40.0 kg per 100 decagrams of wort and fermenting at 30-3.5 deg.C.
The prod. has improved flavour and nutrient value and gives stable fermentation prods. at reduced cost. Bul. 18/15.5.80

BARR/ ★ D11 03489 D/03 ★US 4241-648
Appts. for shaping and precooking tortillas - with rotatable, heated drum and pivoting heated compression plate
BARRERA R G 02.04.79-US-026368 (09.11.77-US-849890)
(30.12.80) A21c-03
02.04.79 as 026368 (6pp295)
Food is processed in an appts. which comprises a heatable, rotatable drum. A heatable compression plate has an arcuate surface and is pivotable to a position at which the drum and plate surfaces are spaced apart by a distance desired for processing the food.
Pref. the drum is advanced with a stepped motion, the end plate which the advancing drum surface first passes under, movable towards and away from the drum while the other end plate remains pivotally fixed.
The appts. is used for processing a compressible food materi wheat flour tortillas. The appts. heats the tortilla durin compression phase to stabilise its shape.

MRSC ★ D11 03490 D/03 ★US 424
Appts. for filled dough tube mfr. - has tubes supported interna conveyor rods during baking before filling
MARS INC 15.01.79-US-003226 (03.08.78-US-930757)
P28 (30.12.80) A47j-37
15.01.79 as 003226 Div. ex. 4162333 (9pp1358)
Appts. for making e.g. a cheese-filled pretzel dough tube comp a die member on a conveyor and consisting of elongate sup extending perpendicularly to the conveyor, and an extr depositing a tubular dough piece on each support. The pieces carried through a baking oven after which the tubes are transfe to cups on a second conveyor.
The tubes are pref. filled on the second conveyor. The supports pref. rods with round cross-section and pointed at the end, and be coated with antifriction material to assist loading and unload The supports are pref. in spaced transverse rows on a conveyor The parent patent claims the method ofmfr.

PILL ★ D11 03652 D/03 ★US 424
Emulsifier system for dry, prepd. cake mixes - contg. propy glycol mono:ester, alpha mono:glyceride, and glyceryl lacto este
PILLSBURY CO 24.10.78-US-954145
E17 (30.12.80) A21d-02/16 A21d-10
24.10.78 as 954145 (8pp478)
Blend of commercial food grade emulsifiers suitable for use in a prepd. mix contains:45-68%propylene glycol monoester (I); 20-alpha-monoglyceride (II); and 9-22% glyceryl lacto ester (III).
The blend affords significant improvements in the moistness H2O-holding capability of cakes baked from dry mixes, w providing a tender texture and fine even grain structure excellent eating quality to the cake.

See Also

D16 J8 0049829

D12: MEAT; FISH PROCESSING

BEEH- D12 38217 C/21 =EP --20-471
Appts. for extruding composite food products - with die housing divided into separate passageways for individual food components
BEEHIVE MACH INC 02.11.78-US-956973
*+P71 (07.01.81) *WP8000-908 A22c-07*
31.08.79 as 901292 E(FR)
(WP8000908)

DARL- D12 45114 C/25 =EP --20-722
Low fat stabilised bone prodn. for gelatin mfr. - by heating out of contact with liquid fat
DARLING-DELAWARE 04.12.78-US-966073
*P82 P83 +P41 (07.01.81) *WP8001-211 +A23l-01/31 A23p-01 B02c-23/08*
29.11.79 as 900132 E(AT CH DE FR GB LU NL SE)
(WP8001211)

NIJH- ★ D12 02403 D/03 ★EP --21-548
Apparatus for electrically stunning animals esp. pigs - with electrode pair shaped to receive animal head
MACH G J NIJHUIS BV 25.06.79-NL-004935
(07.01.81) A22b-03/06
24.06.80 as 200615 (8pp295) (E) NL7705519 FR2390903 FR-693639 CH-157020 E(AT BE CH DE FR GB IT LI LU NL SE)
An apparatus is used to electrically stun animals to be slaughtered esp. pigs. It comprises two endless conveyors which run parallel to each other and arranged to form a V-shaped passageway between their operating surfaces. Two electrodes insulated from each other extend into the passageway and are adapted to engage the head of the animal.
On closure of the electrical circuit between the two electrodes, the difference in velocity between the electrodes and conveyors is reduced to zero. The electrodes are arranged side-by-side and are of such a shape that they engage the sides of the head of the animal at the same time..
The drop-out percentage is lower than using other automatic devices and even lower than when manual methods are used.

TIEL- ★ D12 02405 D/03 ★EP --21
Cutting vent of bird suspended from conveyor - passing round sta with vertically reciprocating vacuum knife
TIELEMAN BV 28.02.80-NL-001202 (19.06.79-NL-004778)
(07.01.81) A22c-21/06
19.06.80 as 200714 (18pp295) (E) US3958303 US4136421 FR237 DE2313092 NL7801689 FR2299816 FR2240691 GB1507002 GB201 NL7801712 US3750231 E(AT BE CH DE FR GB IT LI LU NL SE)
Birds are suspended by shackles from an overhead conveyor wh passes round a turntable. The turntable carries vent-cutting he which move in synchronism with the birds and describe a vert reciprocation stroke under the control of stationary ca Associated with the heads are spring-loaded supports which hold bird during vent-cutting. The supports and also the vent-cutting include lost motion linkages which enables the apparatus to proc a wide range of bird sizes..
The apparatus removes the vent from a bird by a combination rotating knife with a vacuum line. The vent is removed effectiv despite size variations between birds.

DANI/ ★ D12 02674 D/03 ★FR 2451-
Conveyor trolley bar attachment for poultry etc. - comprises qu action loop of flexible cable and hook over peg
DANIEL J 19.03.79-FR-007230
P14 (21.11.80) A01k-15 A01k-29 A01k-37 A22b-01 A22c-21
19.03.79 as 007230 (7pp448)
An endless, loop of flexible cable or cord is centrally clamped form two minor loops, one on each side of the clamp. The clamp fixed on top of a horizontal support, centrally between two verti pegs. Each minor loop extends beyond the peg on its side of clamp to hang down over the side of support. The free end of minor loop can be turned back to hook over its peg and form a tw cable suspension loop sized to grip a bird etc. around its legs.
Used for suspending, storing, handling and conveying poultry e between broiler house and market and also for other small anim such as rabbits.

★ D12 02676 D/03 ★FR 2451-715
tutable, dehydrated meat prod. mfr. - by warming gently radiation, subjecting to vacuum pressure and centrifuging
RQUIN R 23.03.79-FR-007733
.80) A23b-04/04
as 007733 (3pp448)
f dehydrated meat prod. is claimed which can be preserved long periods and then reconstituted by adding back water. ess does not involve the use of chemicals or culinary prepn. ally, strips of meat, 3mm thick X 2cm X 3cm, are frozen to - C. and then warmed gently to drive out moisture. Infra-red n is pref. for this. The prod. is then subjected to vacuum e and finally centrifuged to ensure a moisture content of 6%. The dehydrated prod. is pref. sealed in cellophane s.

★ D12 02684 D/03 ★FR 2451-783
cleaning and size grading mussels and oysters etc. - by with elevator, brushes rakes and vibratory grills
AGNOLI J P 22.03.79-FR-007240
(21.11.80) A22c-29/04 B07b-01/28
as 007240 (16pp448)
chine is charged by the tilting skip of an elevator powered by d, geared motor. The traverse of the skip is determined by nd lower limit switches.
gle electric motor is used to motivate the brush mechanism reaks up the initial clusters of mussels etc., to brush clean d. and to rake the prod. through the gaps of size grading n electric vibrator is used to oscillate the grills which serve ratory conveyor. The speed of conveying is adjustable by the vibrator support arm between (+-)45 deg. to the tal and thus adjusting the amplitude of vibration.
st and compact machine which is inexpensive to build and and is very effective for preparing oysters etc. for market.

D12 47681 A/26 = GB 1582-588
of nitrosamine formation in cured meat - using nitroxide of 1,2-di:hydro- and 1,2,3,4-tetra:hydro-6-alkoxy-quinoline

ADA PACKERS LTD 26.01.77-US-762745
(14.01.81) *US4088-793 A23b-04/14
as 049674 (9pp963)
mine control in nitrite aired meats comprises treating the efore cooking with a nitroxide deriv. of a 1,2-dihydro or etrahydro-6-alkoxy or hydroxy quinoline cpd. to reduce the nitrosamines formed when cured meat is cooked at drying

the meat contains 10-100 ppm. of the active cpd. Method is eful for treating a pork cut for bacon prodn.

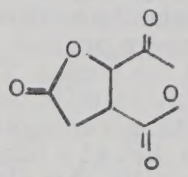
D12 06362 A/04 = GB 1582-695
ng for gathered end of large sausage casing etc. - comprises suspension loop clinched to gathered end
ON CARBIDE CORP 19.07.76-US-706353
+ Q31 Q33 Q34 (14.01.81) *BE-856-900 A22c-13
as 030022 (7pp1376)
(e.g. for sausages) has a closure and loop banger combination l to its gathered end by a U-shaped clip. The combination is from a tape and the clip crimps a free-end of the tape n its legs such tbat the loop can be grasped easily.
two free ends of the tape are crimped by the clip. The width ree end is pref. at least 5% larger than the length of the clip

er and heavier stuffed casings can be hung without damaging ng.

★ D12 02735 D/03 ★GB 2050-807
for shucking scallops - with heated vibrating treatment zone hich meat is removed immediately it is separated from shell
MBERT W R 17.05.79-US-039767
01.81) A22c-29
as 033423 (13pp295)
eat is removed from a scallop by conveying it through a ent zone where it is subjected to an elevated temp. aneously the scallop is subjected to movement to open it and the meat.
reatment zone is vibrated by an eccentric drive. Pref. the f the treating zone is 190 to 220 deg.F. and the scallops may om 10 secs to five minutes to open.
meat falls from the zone immediately it is released while the ntinues to move in the initial direction. Pref. the scallops are ed to a vibratory motion superimposed on the movement n the treatment zone.
scallop meat is removed immediately it becomes separated ne shell. This avoids cooking of tbe adductor muscles of the s.

ELEL- ★ D12 D/03 ★HU T019-205
Lifting and lowering mechanism for slaughter houses - has load-bearing part of the hook assembly fitted with slip-preventing unit
ELELMEZESIPARI TERV 29.06.78-HU-EE2584
Q38 (27.12.80) A22b-05 B66c-11/12

PFIZ D12 43040 U/31 = J8 0049-583
Isocitric acid lactone - anhydride - for use as additive slowly liberating acid esp for foodstuffs, partic meat
PFIZER CORP 23.12.71-GB-060034
E13 (12.12.80) *DE2262-473 A23l-01 C07d-493/04
22.12.72 as 128341 (3pp)
Isocitric acid lactone-anhydride useful as additive for foodstuffs partic, meat, of formula (I) is slowly hydrolysed first to the lactone and then to free acid. The liberation of the acid can be further delayed by coating particles of isocitric acid lactone-anhydride with an edible glyceride (animal or vegetable) solid at temp. up to 40 deg.C or a hardened oil, or an edible salt of a fatty acid. This cpd. is prepd. by dehydrating cis-isocitric acid lactone with acetic anhydride. (J48075586).



(I)

NNSH D12 50885 C/29 = J8 0049-818
Meat prod. mfr. - by dispersing raw or dry powdery gluten in acidic soln., hydrolysing, adjusting pH, sepg. ppte., washing and drying ppte., etc.
NIPPON SHINYAKU KK 29.11.78-JP-148399
(15.12.80) *J55074-774 A23l-01/31
29.11.78 as 148399 (3pp5)
Process comprises (a) dispersing raw gluten or dry powdery gluten in aq. acidic soln., (b) hydrolysing at 10-60 deg. C with stirring; (c) adjusting pH of hydrolysate to 3.0-5.0 to ppte. protein at its IEP; (d) sepg. pptd. protein from the mother liquor; (e) washing and dehydrating the sepd.. protein (f) dispersing again in weakly alkaline soln.; (g) neutralising the dispersion; (h) adding animal and vegetable oil and fat and opt. sugar, seasoning, spice, antioxidant, etc. to the dispersion; (i) emulsifying the mixt.; (j) spray-drying the obtd. emulsion; and (k) combining thus obtd. powdery compsn. in meat material with other additives.
By hydrolysing the acidic suspension of wheat gluten under moderate conditions the amide bonds in gluten can be de-amidised and soluble odourless wheat protein can be obtd. Wheat protein obtd. can be used not only as the filler for meat protein, but also as the coating material for animal and vegetable oil and fat. The powdery oil and fat obtd. with the de-amidised wheat protein, is excellent in emulsifying property and bonding property and can be added freely to the meat material (e.g. animal meat, fish meat, etc.) for processed meat foods such as ham, sausage, etc. The processed meat prod. obtd. has good tastes taste and flavour and has a similar appearance to fatty meat. (J55074774).

ITAG- D12 56128 X/30 = NL-165-636
Freezing/unfreezing trough for food - with paddles oscillating along trough contours
INT AGRI-SYST 30.03.67-US-627123
Q78 (15.12.80) *DS1601-938 + A22c-21 A23n-12/02
07.03.68 as 003216 (5pp1014)
For moving the carcases of fowl swirling in an elongated tank with a semicylindrical bottom, an agitator blade is used which swings from one side of the tank to the other.
The blade hangs from driving levers and consists of a narrow strip which throughout its swinging motion is aligned radially to the centreline, whilst its side faces diverge slightly towards the tank bottom.
With this type of agitator the carcases cannot become trapped between the blade and the bottom.

UNIC D12 65287 W/39 = NL-165-772
Peelable tubular food casings - coated on inside with polyethyleneimine - ketene dimer reaction prod.
UNION CARBIDE CORP 15.10.74-US-514731
A97 P42 Q67 + Q31 Q32 Q34 (15.12.80) *US3905-397 A22c-13 C08k-05/07 C08l-79/02 C09d-03/49
04.07.75 as 008027 (6pp922)
A tubular meat product (eg. ham) casing comprises regenerated cellulose whose inner surface is coated with a curable compsn. comprising a water-soluble polyethyleneimine (I) and a ketene dimer (II) of formula (R)(R')C:C(O) (where R and R' are each 4-26C aryl or (cyclo)alkyl or H with the proviso that not more than 1 is H). (II) is present in amts. of 0.3-5 wt.% and (I) is used such that the wt. ratio to (II) is 1:1;20.

The compsn. is applied so that (II) is present on the substrate surface in amts. of 0.31-2.5 mg/100 sq.cm. and (I) (which has a m.wt. of at least 20000) in amounts of at least 0.031 mg/100 sq.cm. whereafter the coating is crosslinked. The casing has good peelability after the contents have been cooked.

STRK ★ D12 03224 D/03 ★NL 7904-602
Neck vertebrae stripper for fowl carcass processing line - prevents damage to wings and ensures adequate stroke for efficiency
STORK PMT BV 12.06.79-NL-004602
(16.12.80) A22c-21
12.06.79 as 004602 (11pp1014)
A first fixed clamping detail and a second which pivots on a horizontal axis are linked to a cam and lever system in a plant for extracting the vertebrae from the neck tissue of the carcases of fowl hanging by their feet from a moving conveyor. The cam system works with a guide relatively to which a frame carrying sets of clamps moves along the path followed by the carcases. As the frame moves, the second clamp starting from an open topmost position, is moved towards the first clamping detail. The clamps grip the neck of the fowl and are then drawn downwards together.

Pref. the first clamping detail consists of a horizontal rail from the ends of which two diverging guide fingers project. This is fixed to a bracket which slides up and down on the frame. The second clamp similarly, has a horizontal clamping rail fitted to the end of a curved, hinged arm to which a cam following arrangement is fixed. The other end of the arm is fixed to a bracket at a hinging point with a horizontal axis, beneath the clamping rails; this also being attached to the sliding bracket.

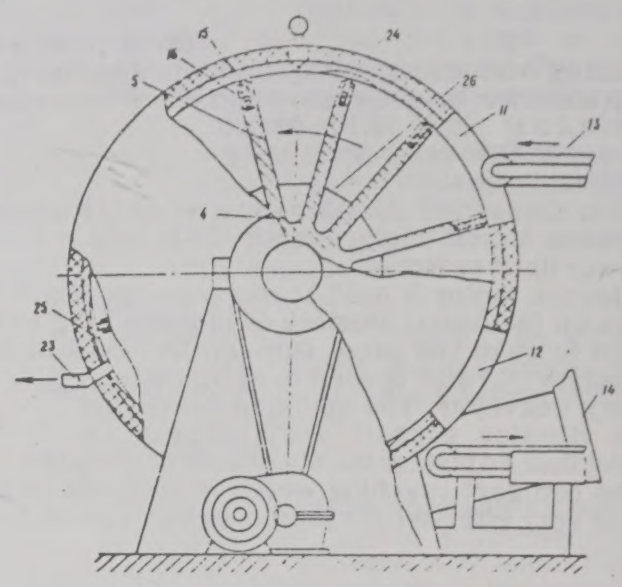
KMGA= ★ D12 03313 D/03 ★SU-733-622
Meat preservation in varnished tinned cans - includes addn. of dried skimmed milk and lactose to prevent corrosion
KAZA MEAT IND RES 09.01.78-SU-584207
(20.05.80) A23l-01/31
09.01.78 as 584207 (3pp70)
Meat preserves are produced by prepg. the meat, mixing it with dried skimmed milk and other additives, packing the mixt. into lacquered, tinned cans and sterilising.

This method is improved by adding to the meat a mixt. of dried skimmed milk and edible lactic sugar.

By this method the sulphidic corrosion of lacquered tins is suppressed and the nutrient value of the product is preserved.

ASLA/ ★ D12 03459 D/03 ★SU-734-482
Food prod. rapid freezing unit - has drum whose cowling upper part has atomisers connected to carbon di:oxide coolant supply pipes
ASLANOV YA A 29.12.77-SU-562029
Q75 (25.05.80) F25d-03/10 F25d-13/06
29.12.77 as 562029 (4pp110)
Unit for rapid freezing of food prods. can be used for m poultry. It contains a horizontally-positioned thermally i drum with loading and unloading openings, and a rotor wi ribs fitted in the drum. The ribs form cavities for prod. pos The unit is also provided with pipes for coolant supply and and a drive for rotor rotation. In order to intensify the process by using liq. carbon dioxide as coolant, the drum upper part is provided with atomisers connected to the supply pipes.

The rotor radial ribs are provided with sprung plates for hermetisation. The drum cowling inner surface prior atomisers and coolant outlet pipes is provided with longitudi for cavity pressure regulation. Thus, the use of liq. carbon under pressure considerably accelerates the product process and prevents product drying. Bul. 18/15.5.80.



KORH/ D12 62206 A/35 =US 42
Carcass handling in slaughterhouse - with side swinging ar removal of hook and carcass from overhead rail
KORHONEN K 23.02.77-SE-002030
*+Q21 (30.12.80) *DE2807-837 A22b-05*
02.02.78 as 874410 (7pp1376)
Meat cutting stand consists of a vertical member fixed relativ conveyor track, and a device on the stand member to rece carcass hanging from a hook on the track which can be accur pivoted to grip and move the carcass away from the track.

The receiving device has 2 cantilevered bars which grip and the side faces of a yoke of the hook, and a third cantilevere which supports the bottom face of the yoke.

Meat cutting capacity can be increased by 30%.

See Also
D13 GB 2050800

D13: OTHER FOODSTUFFS

AMPL- ★ D13 02049 D/03 ★BE-884-962
Drinking straw - with block of opt. flavoured frozen material around lower part to chill liq.
AMPLIKART SPRL 28.08.80-BE-884962
P27 (16.12.80) A23g A47g
28.08.80 as 884962 (4pp515)
A drinking straw is provided with a block of frozen material around the lower part of the straw, to chill liquid passing through the straws. Opt. the frozen material is ice with or without flavouring for transfer to the drink. May be made like an ice lolly, by substituting the straw for the conventional stick.

LODI- ★ D13 02092 D/03 ★DE 2924-326
Viscous paste drying method - by heating in vacuum after forming azeotropic mix. with added organic solvent
GEBR LODIGE MASCH G 15.06.79-DE-924326
Q76 (08.01.81) A23l-01/40 B01d-01/24 F26b-01
15.06.79 as 924326 (13pp39)
Viscous pastes such as hydrolysed proteins and/or meat extract which tend to agglutinate by the effect of exothermic heat when the moisture content ops, are dried by first adding an organic solvent to the damp paste. The solvent, pref. isopropyl alcohol, methylene chloride or acetone, is a low-boiling substance which forms with the water an azeotropic mixt. which is mixed with the paste to a uniform dispersion. The subsequent drying is pref. done in a vacuum.

This saves the labour intensive drying in thin layers on shee drying cabinets at 300-330 K which requires many drying cabi andcalenders. It saves labour, time, capital and energy.

RICH ★ D13 02118 D/03 ★DE 292
Herbal sweets mfr. - by adding ground herbs to hot filler past hard sweetmeat shells
RICHARDSON-MERRELL INC 22.06.79-DE-925229
(08.01.81) A23g-03
22.06.79 as 925229 (7pp39)
Herbal sweets are produced by enclosing a core of a viscous f paste with a taste of aromatic herbs in a hard shell of sweetm The prefd. material for the filler paste is extremely fine gro particles of herbs such as camomile, peppermint, sage or thyme.

The present method of evaporating a herbal extract and mixir with honey, syrup or malt extract quires prolonged evaporation expensive apparatus and results in loss of active agents. O methods, based on essential oils do not produce the natural fr taste of the new method.

/ ★ D13 02119 D/03 ★DE 2925-231
e storage rack - with serrated perforations on support strips eese retention during inversion
LLER F 22.06.79-DE-925231
(08.01.81) A01j-25/16
9 as 925231 (8pp39)

age rack for cheese of small size such as Camembert and rger has shelves, usually consisting of a grid on which the s have to be turned by placing another shelf on top and inveing wire grid is now replaced by strips of plastic or of alloy steel with punched serrations resembling the surface of a grater. rrations are present on one or on both sides. Existing racks converted by applying serrated strips above or between the ars.
cheeses adhere to a shelf during the turning process so that no shelf need be placed on top and the heavy manual work is All shelves of a rack on a pallet can now be inverted together echanical appliance.

★ D13 02126 D/03 ★DE 2925-372
rotein foodstuffs base on cheese - pref. in form of crisps made our or breadcrumbs and starch
IST J 22.06.79-DE-925372
01.81) A23c-19/02
9 as 925372 (9pp367)
rotein foodstuffs, esp. in the form of crisps (chips), are based ese, pref. comprising more than 50 (esp. 60-80) wt.% cheese inor amts. of breadcrumbs or flour, esp. with 5-15wt.% starch der.
cheese can be a natural cheese (e.g. a soft cheese such as mbert or cottage cheese), a processed cheese, a cream cheese, ey-free milk coagulate, or a concentrate produced by ltration of milk. It can opt. contain spices and/or added e.
products have a high protein content without having the taste of analogous meat-based products.

G ★ D13 02143 D/03 ★DE 2926-010
products based on casein foam - impregnated with aq. soln. alcohol and/or sugar
EGGLE MILCHINDUSTR 27.06.79-DE-926010
.01.81) A23l-01/34
79 as 926010 (12pp367)
articles comprise a casein-based protein foam with a pH of pref. 6.0-7.5) impregnated with an aq. soln. contg. an alcohol r a sugar, and opt. coated with a confectionery compsn. The ln. has a water content of 40-75(pref. 58-70)wt.% and a pH above d opt. contains flavours and other additives.
foam can be produced by extruding a casein-based material contg. raw fibre and/or other proteins) at elevated temp. and ure in the presence of gas-releasing substances, e.g. as bed in DE2742083.
articles have a consistency from soft to hard without being red rubbery or leathery by impregnation.

I ★ D13 02174 D/03 ★DE 2926-282
rolonging feed and feed additives for animals e.g. pets - contg. iary alkyl sulphonate(s) derived from unbranched paraffin carbon(s) contg. 10-21 carbon atoms
ECHST AG 29.06.79-DE-926282
3 *(08.01.81) A23k-01 A61k-31/10*
79 as 926282 (9pp280)
animal feeds and feed additives contain secondary esulphonates derived from straight-chain 10-21C paraffin carbons.
f. alkanesulphonates are those derived from 13-17C paraffin carbons. The alkanesulphonates may have a di- and lphonate content of up to ca 30%. Tbey are generally in the of alkali or magnesium salts, pref. the sodium or potassium
specified alkanesulphonates have a life-prolonging effect on ls. This may be useful e.g. for domestic animals such as dogs ts, or for laboratory animals (e.g. rats) used in long-term s.

V ★ D13 02247 D/03 ★DE 3018-008
ation of spherical portions from extruded sections e.g. of e - having cutter after extrusion nozzle with moulding (NL 30) groove and former
OW BRAND MILK PRODUCTS 26.06.79-JP-U87306 (26.06.79-U87305)
3 X25 P13 (08.01.81) A01j-21/02 A01j-27/04 A21c-03/10 B29b-03
30 as 018008 (26pp1053)
ical particles are formed from chopped up segments from an ded section. A sensor is fixed in front of the extrusion nozzle is sends out a signal when a prescribed length of material has extruded. This signal initiates the cutter to cut off the extruded section.
A circular former rotates in front of the unit and picks up the length of material which the cutter has dropped off. The material is then formed in a circular groove round which the particle is pushed, finally being released at the bottom.
Allows the continuous automatic production of spherical portions without damage to them.

NEST ★ D13 02255 D/03 ★DE 3021-251
Shelling and/or decaffeination of coffee beans - by ultrasonic treatment in liq. medium
SOC PROD NESTLE SA 14.06.79-CH-005572
(08.01.81) A23f-05/02
04.06.80 as 021251 (12pp367)
Coffee beans (green or roasted) are shelled and/or decaffeinated by suspending the beans in a liq.medium and irradiating with ultrasonic waves with a frequency of 13-100 (pref.20-40) kHz and an energy sufficient to produce cavitation effects (pref. at least 70W).
The conditions can be precisely controlled to produce partial or total breakdown of the shell and/or extn.of caffeine into the liq. medium; these effects are greatly accelerated (e.g. by a factor of 2-4) compared with mechanical agitation.
diacetvlactis and Streptococcus lactis/cremoris in a medium based on whey or skim-milk. The yield of (I) can be increased by adding citric acid to the culture medium.
The distillate has a high (II) content and has good flavouring properties without impairing the storage stability of the flavoured butter.

LIFE- ★ D13 02290 D/03 ★DE 3023-110
Low-sugar chewing gum compsns. - contg. hydrogenated starch hydrolysate (NL 23.12.80)
LIFE SAVERS INC 21.06.79-US-050573
(08.01.81) A23g-03/30
20.06.80 as 023110 (22pp367)
Chewing gum compsns. comprise a chewing gum base and a hydrogenated starch hydrolysate, (I).
(I) can be prepd. as described in US Reissue 26959 or US 3556811. It pref. contains 72-80% solids comprising 4-20% sorbitol, 5-65% hydrogenated disaccharides, 15-75% hydrogenated tri- to heptasaccharides and 10-65% hydrogenated polysaccharides.
The compsns. pref. contain 2-60 wt.% of (I), opt. together with 10-75 wt.% sorbitol (II), pref. with a (I):(II) wt.ratio of 3:1 to 1:30. Other sweeteners, e.g. sugar alcohols, sugar and/or artificial sweeteners, can also be present.
(I) acts both as a sweetener and a plasticiser, giving low-sugar or sugar-free compsns. with long-lasting softness and flexibility and good extrusion properties.

MILO- D13 87771 A/48 #EP --20-381
Processing of sorghum grain - by forming slurry which is passed through turbine pumps to remove husks
MILO INT INC (HART) 04.10.76-US-729376 (20.11.78-EP-901030)
*(07.01.81) *US4126-707 A23l-01/10*
20.11.78 as 901030 E(FR)
(WP8001035)

GRIM/ D13 31073 C/17 =EP --20-431
Prod. dispersible as discontinuous phase - is coated with mixt. of components inert and reactive towards continuous phase, useful e.g. in foods and pharmaceuticals
GRIMBERG G S 02.10.78-FR-028054
*B07 (D21) (07.01.81) *WP8000-665 A23p-01 B01j-13/02*
01.10.79 as 901209 E(AT CH DE GB LU NL SE)
(WP8000665)

BATT D13 34579 C/19 =EP --20-469
Amorphous depolymerised cellulose - produced by hydrolysis of cellulosic materials in conc. acid
BATTELLE MEMORIAL 24.10.78-CH-010963
*A11 B04 (B07) (07.01.81) *WP8000-843 A23l-01 A61k-07 C08b-15/02*
23.10.79 as 901285 E(CH DE FR GB NL SE)
(WP8000843)

PURD D13 27285 C/16 =EP --20-496
Film-coating foods or pharmaceuticals with polymer - using fine particulate suspension of water-insol. polymer in aq. medium
PURDUE RESEARCH FOUNDATI 02.10.78-US-947948
*A96 B07 P33 (07.01.81) *BE-879-132 A61k-09/32 C08l-01/32*
26.09.79 as 901350 E(CH DE FR GB LU NL SE)
(WP8000659)

VANG/ D13 23758 C/14 =EP --20-598
Disposable tea-bag with choice of tea filling for consumer - has extended filling funnel for holding and removal from pot
VANGEDAL-NIELSEN E 16.11.78-DK-005109
*A97 P27 Q32 +P28 Q34 (07.01.81) *BE-880-054 A47g-19/16 A47j-31/06 B01d-23/04 B65d-81/34*
14.11.79 as 901569 E(AT CH DE FR GB LU NL SE)
(WP8001037)

PROC ★ D13 02370 D/03 ★EP --21-481
Partially encapsulated flavour compsns. - contg. encapsulated volatile malodorous cpds. and mon-encapsulated less volatile cpds.
PROCTER & GAMBLE CO 12.06.79-US-047831
E19 (07.01.81) A23d-03 A23l-01/22
02.06.80 as 200507 (15pp478) (E) US3867556 US3819838 DE2037947 GB1327761 GB1068712 E(BE DE FR GB IT NL)
Flavour compsn. consists of (a) a volatile malodorous flavour material (I) encapsulated in an oil- or water-insol. encapsulating agent (II); and (b) other non-encapsulated flavour materials..
The artificial flavour compsns. (esp. meat or butter flavours) have a pleasant aroma at room temp. and at cooking or grilling temps. when used in oils, shortenings, soups, etc. Flavoured foods have an improved shelf stability, and retain a balanced flavour after cooking.
Typical (I) include up to 6C carboxylic acids, diketones, 4-8C aldehydes, S-contg. cpds., and heterocyclic cpds. contg. one or more S or N atoms.

PROC ★ D13 02372 D/03 ★EP --21-483
Water-free flavour enhancing compsns. - contg. liquefiable fat, and microfine particles of flavour enhancer
PROCTER & GAMBLE CO 13.06.79-US-047974
(07.01.81) A23d-05 A23l-01/22
03.06.80 as 200514 (26pp478) (E) US3271166 FR2285077 FR1346376 US3071475 US1691087 FR2049113 E(BE DE FR GB IT NL)
Water-free flavour enhancing compsn. consists of above 50% of an edible liquefiable fat component (I), and particles of a non-encapsulated particulate flavour-enhancing material (II). (II) has density 1.5-2.4 g/cc; particle size 1-10 micron; and a particle size distribution sufficient to provide a flavour-enhancing suspension of (II) in (I) when liq. for at least 2 hr..
The compsn. is stable to storage, is pourable at room temp., and contains (II) (esp. salt) as a stable suspension for acceptable periods of time. When heated the compsn. uniformly delivers (II) to the contained foodstuff, and does not spatter (like butter, etc.).

FERG/ ★ D13 02449 D/03 ★EP --21-629
Processing of mushrooms - by infusing heat stable gel forming material using increased or decreased pressure
FERGUSON A M 06.06.79-US-046078
(07.01.81) A23b-07/06 A23l-03
02.06.80 as 301818 (14pp478) (E) NO-CITNS. E(AT BE DE FR GB IT NL)
Porous foodstuffs such as mushrooms (I) are processed as follows: (a) (I) are introduced into a liq.-filled sealable container; (b) the contents are subjected to at least one alteration of pressure; and (c) pressure is restored to atmos. and (I) is removed..
Process avoids the known significant wt. loss that occurs when (I) (and other porous foodstuffs) are canned. The treated (I) have texture superior to those conventionally canned, which is at least as good as fresh (I) sauteed, etc.

IRSH- ★ D13 02560 D/03 ★EP --21-855
Prodn. of no-cook dehydrated rice - by parboiling, soaking, cooking, drying and puffing
IRISH SUGAR COM LTD 16.05.80-IE-001032 (03.07.79-IE-000474)
(07.01.81) A23l-01/18
02.07.80 as 302249 (12pp367) (E) US4133898 GB1456460 US4166868 US2616808 GB1453759 US3408202 E(AT BE CH DE FR GB IT LI LU NL SE)
Prodn. of dehydrated rice is carried out by (a) soaking parboiled rice, (b) cooking the soaked rice, (c) drying the cooked rice to a moisture content of 2-20 (pref. 7-14) wt.%, and (d) puffing the dried rice at 150-350 deg. C..
The product can be rehydrated to a palatable state in 2-3 min. by adding boiling water, and can thus be used in dry soup mixes and instant foods.
The starting material is pref. parboiled long-grain rice.

FROM ★ D13 02590 D/03 ★EP --21-949
Caseinate prepn. from casein - and a solubilising base, by heating under pressure
FROMAGERIES BEL-LA VACHE 14.06.79-FR-015297
B04 C03 (B07 D21) (07.01.81) A23j-03/02
16.06.80 as 400842 (12pp520) (F) GB2004174 US2005730 J45001177 J46001178 2.Jnl.Ref E(BE DE GB IT LU NL)
Caseinates are prepared by adding a mixture containin casein, acid casein in the form of fresh or powdered curds precipitates (I), a solubilising agent (II) and water, to a c extruder, and holding the mixture for 10-60 sec. at 15 to 150 sq.cm. at 30 to 90 deg. C..
The caseinates are useful in the food industry for ice des imitation milk, sauces, dietary foods, infant foods, etc., and a the pharmaceutical and chemical industries in glues, adhe paints, insecticides, inks, cosmetics, linoleum etc. The proc cheaper, simpler and more rapid than the conventional meth making caseinate.

INRG ★ D13 02611 D/03 ★EP --
Total enzymatic hydrolysate of whey protein - contg. mostl mol. wt. peptide(s), suitable for oral or parenteral feeding
INRA INST RECH NAT 26.06.79-FR-016483
(D16) (07.01.81) A23j-03 A61k-37/02
24.06.80 as 400946 (52pp1251) (F) US2180637 2.Jnl.Ref E(BE CH D GB IT LI LU NL SE)
A novel total enzymatic hydrolysate (A) of whey prote practically free of residual proteins, contains at least 50% pep with 2-5 amino acids and free amino acid content is below 15%. 70-90% of the nitrogen content is provided by peptides having f than 10 aminoacids.
A specified hydrolysate contains no material which can be by 12% trichloroacetic acid and has the following aminoacid pr Ile 6.0; Leu 9.9; Lys 9.2; Cys 1.8; Phe 3.2; Thr 6.7; Tyr 3.6; Trp 2.0 5.5; Arg 2.7; His 1.7; Ala 4.9; Asp 9.5; Glu 17.6; Gly 1.7; Pro 6.2; Se Met 2.0.
Dietetic foods for oral or parenteral administration contg. (A) also claimed..
(A) are directly assimilable by the intestinal mucosa and stimu defective enzyme systems, so are esp. useful for feeding pati with pancreatic insufficiency or metabolic disorders.

MEGG D13 45267 A/25 =GB 158
Stable milk replacement, esp. for calf rearing - obtd. from w with reduced cation content, avoiding food stress
MEGGLE MILCHIND 21.07.77-AT-005290 (07.12.76-DE-65538
*C03 (14.01.81) *NL7713-551 A23c-11/02*
01.12.77 as 050125 (7pp963)
Milk substitute (I) free of skim milk casein for feeding of mamm and based on modified whey and fat, is claimed. The cation con of (I) is lower by 20-55% cf. natural whey and the lactose conte also lower. (I) has an ash content below 15 wt.% (dry wt.) pro content at least 17 wt.% (dry wt.), fat content of over 9 wt.% (dry water content of below 70 wt.%, pH of 4.5-4.0, measured in a 10% soln., and a Ca/P ratio of 1.2-2:1. (I) contains an organic (acceptable in foodstuff) with preserving properties.
Prod. is esp. useful in calf breeding.

LIFE- D13 04054 A/02 =GB 1582
Soft moist chewing gum compsn. - contg. gum base, xylitol xanthan gum or alginate as hydrophilic colloid binder
LIFE SAVERS INC 23.08.76-US-716928
*A97 (14.01.81) *US4065-578 A23g-03/30*
22.08.77 as 035125 (4pp954)
Sugarless chewing gum in the form of a soft, moist continu cohesive gum comprises gum base cylitol as a bulk filler sweetener, and a hydrocolloid consisting of xanthan g carrageenan or an alginate deriv. of kelp as a binder being pres in an amt. of 0.03-1 wt.%.
Pref. the xylitol is present in an amt. of 50-70 wt.%, and in a ratio to the hydrocolloid of 60:1 to 2000:1. The hydrocolloid impa continuity to the gum.

BESN/ D13 59455 Y/34 =GB 1582
Roller press for juice extn. from ligneous plants - by pass between large roller and satellite rollers
BESNARD R 27.04.76-FR-013075
*P71 (14.01.81) *BE-853-805 B30b-09/20*
22.04.77 as 016755 (5pp1376)
Press for squeezing juice from plants on ligneous materials cons of a main pressure roller co-operating with small dia. satel rollers. The satellite rollers are grooved perpendicular to the ro axis. The main roller is smooth.
Pref. the groove bases are open to allow liquid drainage. Pla with forks are pref. used to remove encrusted material from satellite rollers.
Press does not require an endless belt.

D13 37197 B/20 #GB 1582-806
us prodn. of buttery prod. spreadable at low temps. - from lk, cream and vegetable oil in normal appts.
SKA MEJERIERNAS 25.01.78-SE-000900 (03.02.78-GB-)
*(14.01.81) *BE-873-406 + A23d-05/02*
s 004498 (4pp918)
ke edible fat (I) which can be spread at a temp. of 6-8 deg. C in a continuous process in which cream is sepd. from the cow (pref. Bos taunis) and has added a refined vegetable, ol contg. tri-glyceride oil (pref. soy-bean oil). The oil amts. t.% of the total fat content.
eam first has its fat content increased from 36-38 wt.% and ooled to 3-4 deg. C in a storage tank where it is kept for at ee hrs. The cream is then passed in a stream to the churning f a Fritz type continuous butter making machine and the oil ed into the stream at an admixture station. The oil is finely and emulsified by mixing in the stream before reaching the aking machine. The total fat content is more than 40 wt.% temp. of the mixt. entering the machine is 5-6 deg. C. g is done at 5-7 deg. C.
ss results in continuous rather than batch-wise prodn.

D13 40522 A/23 = GB 1582-822
wrapping machine - with one swashplate for axial and second er movement of rotary paper wrapping heads
KOMBINAT NAGEMA (KMOC) 21.04.77-DD-198516
*(14.01.81) *DD-130-647 B65b-51*
as 015685 (6pp1376)
vrapper twisting device consists of a driving shaft mounted in ng, and an axially movable sleeve mounted in the housing and a wrapper gripper. A rod passes axially through the sleeve to nd close the gripper. The rod is moved axially by a swash ever and cam mechanism. A further swash plate moves the axially.
both swash plates are connected by radial bearing pins to the Machine is cheaper and no. of moving parts are reduced.

★ D13 02732 D/03 ★GB 2050-797
oncentrate prodn. for cheese or sour cream mfr. - by ane filtration with pH redn. by lactic acid fermentation of milk
ILAC A S 12.06.79-GB-020374
1.81) A23c-09/14 A23c-17/02
as 020374 (3pp955)
or (partly) skim milk is pasteurised, cooled and inoculated itable bacteria and held until the pH is reduced, pref. below s then mixed with pasteurised non-acidified milk in a ratio s to give a pH of 5.3-6.4, and immediately subjected to ane filtration.
concentrate contains casein, whey protein and lactoserum in rect proportions cheese or soured cream prod. it is to be used the milk during membrane filtration is stable so the Ca of the prod. can be controlled. The method is suitable for ious closed loop membrane filtration.

- ★ D13 02733 D/03 ★GB 2050-800
of fat slices for wrapping meat - from chilled emulsion of ack fat and rinds with binder
ATPAK HAMPSHIRE 09.05.80-GB-015399 (10.05.79-GB-99)
2) (14.01.81) A23l-01/34
as 015399 (3pp955)
fat suitable for wrapping around a cookable meat prod. is by forming an emulsion of pork back fat, mixing the emulsion ater and a binding agent, moulding the paste, and chilling it.
prod. is esp. suitable for wrapping rolled poultry meat, eg. for roasting. Rind may be included in the emulsion, and the e involved in derinding and trimming sheets of pork fat to avoided.

- ★ D13 D/03 ★HU T019-206
PN-content additive for ruminant fodder - contains e.g. urea ier of starch hydrolysate, clay mineral and phosphatide
RARTUDOMANYI EGYE 22.12.78-HU-CO0360
(27.12.80) A23k-01/18

★ D13 02906 D/03 ★J5 5144-852
chewing gum for combining with ice cream - includes tuting some small or low temp. hardening bonding agent with ohol
RINAGA & CO LTD 24.04.79-JP-049744
11.80) A23g-03/30 A23g-09
9 as 049744 (5pp5)
newing gum is prepd. with a bonding agent which is obtd. by tuting (a) low temp.-hardening bonding agent such as conc. yrup, reduced conc. malt syrup, maltitol soln., sorbitol soln., gum soln., protein soln., etc. partly or wholly with (b) low temp.-non-hardening bonding agent such as below 3C alcohol, etc. so that the content of (a) and (b) in the objective chewing gum is 0-15%, esp. 1-8% and 1-10% favourably 2-6%, respectively.
Pref. the low temp.-non-hardening bonding agent is a cpd. having low vapour pressure and little plasticising effect on gum base, and which can be used singly or together with other agents. Examples are glycerin, propylene glycol, ethylene glycol, etc.
The chewing gum is not greatly hardened and keeps good chewing property even at below 0 deg.C.

HISM ★ D13 03038 D/03 ★J5 5145-613
Compsn. for relieving thirst and dehydration - contg. phytic acid, inorganic cations and glucose
HISAMITSU PHARM KK 04.05.79-JP-054067
B05 (D22) (13.11.80) A23l-02/38 A61k-09/08 A61k-31/66
04.05.79 as 054067 (7pp5)
Compsn. contains phytic acid, inorganic cations and glucose as effective ingredients. In the case of thirst it is required to supply K+ and Mg++ and usually they are difficult to absorb. When phytic acid is added, they form water soluble chelate with it and the chelate can be absorbed easily. Further phytic acid is pleasant tasting and compsn. can be served to prevent fatigue or restore people involved in sports, etc., supplying water and electrolytes to men working under hot and/or dry condition and supplying water and electrolytes to the scald. Further it serves as the source for inositol, phosphoric acid, myoinositol which shows the protective effect and the activating effect on brain and eyes, etc. and as the precursor for phosphatidylinositol which shows the activating activity on nervous functions.

SAKI D13 39539 A/22 = J8 0049-820
Instant dried foods prepn. - by adding crystalline substance to food, drying and treating under vacuum with microwave energy
SAKAI CHEMICAL IND KK 04.10.76-JP-119718
*(15.12.80) *J53044-643 A23l-03 + A23b-04/04*
04.10.76 as 119718 (5pp5)
Method comprises adding crystalline (in)organic substance(s) which show little heat of dissolution to foods, drying the foods to remove free water and dielectric dielectric-heating the foods under vacuum controlling the microwave energy density.
Various foods, e.g. fried bean curd, etc. can be dried economically and instant dry foods of good preservative property and restoring property can be obtd.
The crystalline substance is e.g., dl-alanine, amino-acetic acid, common salt, etc. (J5304463).

NISS- D13 24847 W/15 = J8 0049-822
Antioxidant compsns - contg. vitamin E, citric acid and quercetin, useful for food preservation
NISSHIN HOUI MILLIN 27.12.72-JP-130008
*E13 (15.12.80) *J49086-557 + A23d-05/04 A23l-03/34*
27.12.72 as 130008 (2pp)
Antioxidation activity of vitamin E in food preservation is enhanced synergistically with citric acid and quercetin.
In an example, a stable soybean oil was prepd. by dissolving natural vitamin E35, quercetin 3.5, citric acid 3.5 mg, and soybeanoil, 50 g in a 200 ml 99.5% etrianol and subsequently removing etrianol under reduced pressure. (J49086557).

MORG D13 10204 T/07 = NL-165-637
Baby milk demineraliser - with dialysis cell,pump , valve replenisher
MORINAGA NYUGYO KK 01.08.70-JP-067632
*(15.12.80) *DE2138-221 A23c-09/14 B01d-13/02*
30.07.71 as 010517 (8pp1014)
An aq. fluid used in the foodstuffs industries is demineralised in a continuous electrodialysis plant. The fluid is delivered to a supply tank for the first of a series of units, each of which has a cell provided with an ion exchanging membrane, and a quantity of the fluid in the prod. storage vessel of one unit, is allowed to overflow continuously into the supply tank of the next.
This quantity corresponds to that delivered to the supply tank of the first unit, whilst the last quantity is adjusted dependently upon the required concn. of minerals in the end prod.
This last quantity is allowed to flow into a storage vessel from which it is drawn off for use, and with the process, milk can be demineralised continuously under conditions which are repeatable.

VIVO D13 39226 F/00 = NL-165-638
Synthetic food compositions contg amino acids
MORTON-NORWICH PROD INC 14.02.68-US-705290
*B05 (15.12.80) *NL6902-123 A23l-01/30*
11.02.69 as 002123 (10pp279)
Food prepns. (I) for human consumption are prepd. in which all essential amino acids or their simple precursors which are converted in the human body to free amino acids, as well as non-

essential amino acids or their precursors, carbohydrates, fats, vitamins and minerals in solid or dissolved forms in required quantities are made into suitable form.

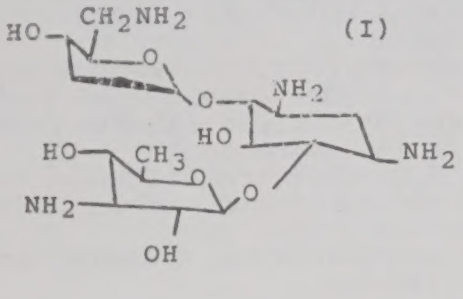
The starting materials must be such that the prepn. obtd. as an ag. soln. with a calorific value of 2.5 cal/c.c. has a) a pH-value of 3-5.7; b) contains max. 15 mg/l of methylmercapton at pH 3.7 or max. 7.5 mg/l methylmercaptan at pH 5.7; wherebV the max. quantity at other pH-values is calculated by linear interpolation, for which purpose the starting L-methionine is specifically purified; c) contains max. 0.038 g/l sulphhydryl gps. at pH 3.7 or max. 0.05 g/l sulphydryl gps. at pH 5.7 and whereby the max.quantity at other pH-values is calculated by linear interpolation; d) contains max. 1.43 g/l glutamic acid or an equiv. quantity of its salt.

(I) are dietary compsns. which may be in the form of aq. solns. or - emulsions or may be dry in the form of a gel. They have a pleasant taste and may be used to supply normal or specific nutritional reouirements without causing digestive disorders.

BRIM D13 38092 X/21 = NL-165-754
6-Deoxytobramycin and 6-deoxykanamycin B - used for treating systemic bacterial infections and as animal foodstuff additive
BRISTOL MYERS CO 13.11.74-US-523292
*B03 C02 (15.12.80) *BE-835-328 A61k-31/71 C07h-15/22*
10.11.75 as 013133 (6pp279)
A pharmaceutical prepn. with antibiotic activity is prepd. with a 6''-desoxy-kanamycin deriv of formula (I) in a suitable form.

Prepn. e.g. by acetylation of kanamycine B to form penta-(N-acetyl)kanamycine B. This is reacted with p-toluenesulphonylchloride to the 3',6''-ditosylate and the product is catalytically hydrogenated and finally hydrolysed with strong base to give (I).

(I) has valuable antibiotic activity and is esp. suitable against infections caused by G(-) bacteria. (I) is very active in the treatmentof systemic infections and may also be used as feedstuff additive in animal feedstuffs.



(I)

BOEF D13 79403 U/52 = NL-165-845
Triglyceride determn by lipase saponifcn - inpresence of carboxylesterase and alkyl sulphate
BOEHRINGER MANNHEIM GMBH 19.06.72-DE-229849
*B04 S03 S05 (15.12.80) *DE2229-849 G01n-33/48*
17.04.73 as 005350 (5pp367)
Determn. of triglycerides is effected by (a) hydrolysing the triglycerides with lipase in the presence of a carboxylic esterase and an alkali(ne earth) metal 10-15C alkyl sulphate, and (b) measuring the amt. of glycerol formed. The pptn. of soaps can be inhibited by adding serum albumin.

The method can be used to determine serum triglyceride levels. As little as 0.005 mg lipase per test is required (cf. 0.1 mg in NL7019083).

DERC/ ★ D13 03229 D/03 ★NL 7904-629
High speed moulding turret for lollipops from syrup - has vertical punches shearing stock pressing and fitting sticks
DERCKX H A J M 13.06.79-NL-004629
(16.12.80) A23g-03/12
13.06.79 as 004629 (9pp1014)
The separation of the portions from a strand of condensed syrup fed to a lollipop prodn. unit, is effected by a shearing punch which reciprocates in a vertical plane. On each stroke a portion is delivered into a prodn. head rotating on a vertical centreline, and a stick is partly inserted into the mould in which the portion is prepressed by the shearing punch. During rotation through two further stations, the stick is pressed deeper into the syrup, and in a third station the final pressing takes place as a finishing punch enters the mould. The turret then rotates the mould to a station in which the lollipop complete with stick is ejected.

Pref. the head rotates in steps of 60.deg. and finish pressing is carried out with the centrelines of the shearing and the finishing punches parallel to each other. The station in which the ejection takes place is in the same plane as that in which the shearing of the portions is carried out.

Eliminates the restrictions on the shape of the lollies and the speed of their prodn. originating in dependence upon centrifugal force for the ejection of the sweets from the moulds.

BEHE- ★ D13 03230 D/03 ★NL
Instant, pre-cooked rice - prepd. by action of moisture and soaked rice
BEHEERMIJ HEREMA BV 15.06.79-NL-004722
(17.12.80) A23l-01/18
15.06.79 as 004722 (7pp510)
Pre-cooked rice is prepd. by allowing moisture to act, in pres a basic substance, on soaked, opt. hulled rice, opt. under inc temp.

The rice is cooked and then rinsed with water. A sol. bas Na2CO3 or gaseous NH3, is added to the cooking and/or water. The rice is then steamed, opt. under pressure, ste shortens the duration of the first cooking. The amt of anh Na2CO3 is 0.2-5 (0.5-1)g/litre. When NH3 is used, the pH of the is about 9-9.5.

The process is less complicated than that of NL Appln.287,40

BUHL ★ D13 03249 D/03 ★RD-
Spray dried milk powder - processed for milk chocolate b exposure as thin film to specified temp.
BUHLER BROTHERS LTD 20.11.80-RD-200047
*(10.12.80) A23c-00/**
20.11.80 as ------ (2pp39)
Spray dried milk powder for use, for example in the manufact milk chocolate, is brought into contact in a thin layer with a s which is held at a temperature of 110-160deg.C (130-150 deg.C) as a suspension in a fatty medium. The layer can be 4 to 30 m thick and the time of contact is kept to 0.05-1.0s (0.1-0.3s). components can be added before the contact with the hot surfac

Spray dried milk powder is less expensive than roll dried p and need not be processed as quickly to prevent deteriorat taste. The new process is suitable for processing standard dried milk powder.

ASKA = ★ D13 03309 D/03 ★SU-
Feed for fur producing animals e.g. young minks - consisting fish contg. tri:methyl-amino oxide with addn. of iron-s chlorophyllin
AS USSR KAREL BIOLO(LENL) 21.11.78-SU-686989
C03 (20.05.80) A23k-01/18
21.11.78 as 686989 (4pp70)
The addn. of iron-sodium-chlorophyllin to raw fish based increases its Fe content and stimulates the metabolitic activ the animal.

The additive is fed in an amt. of 3-7 mg. per head per day o days. Other nutriments can be added. The haemoglobin cont the blood increased by 8%, gamma-globulin by 9.8%, aspartat transferase by 55%, cholinesterase by 105%, etc.

TRAN = ★ D13 03310 D/03 ★SU-7
Feed mixt. for young poultry - contg. maize, wheat, millet, b wheat bran, soya meal, hydrolysed yeast, fish flour, lucerne and clinoptilolite contg. tuff
TRANS CAUCASUS POUL(PHYS =) 08.12.78-SU-693418
C03 (20.05.80) A23k-01/17
08.12.88 as 693418 (4pp70)
Compound feed esp. for young poultry contains (in wt.%) mai 28, wheat 10-24, millet 0.5-6.5, barley 7.5-3.0, wheat bran 4-10, grit 9-17, hydrolised yeasts 3-4, fish flour 6.5-7, lucerne flour, a addition, clinoptilolite-contg. tuff 4-6.

The tuff promotes the assimilability of the feed, incr productivity of the poultry, and reduces the cost.

LIKO = ★ D13 03311 D/03 ★SU-7
Fruit preservation in sugar syrup - includes addn. of methylcell before sealing in jars, used in obesity, diabetes, etc.
LITH FOOD IND EXPTL 01.09.77-SU-527208
A97 (20.05.80) A23l-01/06 A23l-03
01.09.77 as 527208 (2pp70)
Preserves produced from fruit and sugar syrup are modifie adding to the syrup 0.8-0.84 wt.% (w.r.t. the final product) of m cellulose.

The mixt. of fruit and syrup is boiled for 10-15 min.; the product is cooled, poured into jars and sterilised.

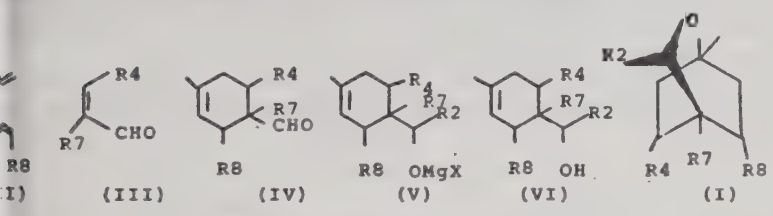
The product is suitable for diet because of the lowered cal value due to the presence of methyl cellulose. It can be us diabetes, obesity, etc., and elimination of heavy metals from gastric system.

ODFO = ★ D13 03312 D/03 ★SU-7
Prodn. of enriched concentrate for use in food - includes treatm steamed grain with aq. acetic acid contg. essential amino acid alternating electromagnetic field
ODESS FOOD IND TECH 10.02.78-SU-579632
(20.05.80) A23l-01/10
10.02.78 as 579632 (3pp70)
Food grade grain concentrates are prepd. by cleaning the g (e.g. buckwheat), washing them in warm water, husking w

aneously periodically introducing satd. steam, and drying. ality of the product is improved and the proteins and vitamins ts are increased by soaking the grain, after the washing, in a % acetic acid soln. contg. essential amino acids, for 1.5-2.8 whilst applying alternating electromagnetic field (21-46 x 104 Before drying the grain is subjected to a Xerothermal ent at 32-48 deg.C to reduce the moisture content to 5-8%.

= ★ D13 03419 D/03 ★SU-734-266
pulp fermenter - has perforated mixing chamber with nted juice inlet outside perforations
RON TECH INST 10.03.77-SU-461843
05.80) C12g-01/02
7 as 461843 Add to 239178 (3pp89)
fficiency of fruit juice extractor, claimed in parent patent , is improved giving high quality of the prod. in high yield by e of perforated bottom and sides of the chamber and of juice sections in which the perforations cover 1/3 of the length from arging hopper and 1/2 of length from the side of juice bleed-off. fermenting agent is introduced beyond the perforations of g sections of the chamber.

★ D13 03613 D/03 ★US 4242-269
yl-3-alkyl-2-oxa-bi:cyclo(2.2.2)octane derivs. prepn. - from 1,3-ene cpd. and alpha, beta-unsatd. aldehyde
FLAVORS & FRAGR INC 16.11.79-US-095147 (20.10.78-US-128)
E13 (D18 D21 D23) (30.12.80) C07d-309/04
9 as 095147 Div.ex 4195100 C.i.p.4195099 (+16.2.79,15.6.79-US-048752) (30pp985)
of 1-methyl-3-R2-4-R7-5-R4-8-R8 substd. 2-yclo(2.2.2)octane derivs. of formula (I) comprises (i) reacting ated buta-1,3-diene (II) with alphabeta unsatd. aldehyde (III) a cyclohexenylcarboxaldehyde (IV); (ii) reacting (IV) with a ard reagent R2MgX; (iii) reacting the resultant cyclohexenyl-ol organometallic salt (V) with water in the presence of a ic acid to give a cyclohexenyl-carbinol (VI); and (iv) cyclising the presence of a cyclising reagent, a protonic or Lewis acid miscible organic solvent at 25-150 deg.C to give (I), (where R2 is kyl; R4 is H, Me or Et; R7 is H or Me; R8 is H or Me; X is Cl, Br, nd provided that when R4 is Me or Et, R7 and R8 are not both H at at least one of R7 and R8 is Me).
s.(I) augment and enhance the flavours and/or fragrances of uffs, perfumes, perfumed articles, colognes, chewing gums, astes, medicinal prods. and smoking tobacco.



D13 30451 A/17 =US 4242-361
ge process for vegetable or animal substances - recycling rom bottom of container to top
RSCH M R (CHRI) 31.05.77-FR-016465 (14.10.76-FR-030874)
*12.80) *DE2736-836 A23b-07/10*
7 as 825487 (3pp931)
ge is fermented to produce sauerkraut by placing salt and ge in a container, whose upper end is then closed with an nt cover; and fermenting the cabbage in an active ntation phase where CO2 is evolved, a neutral fermentation and a final acidifying fermentation phase.
he process, a controlled amt. of sauerkraut juice is removed the bottom of the container during the acidifying phase. The is maintained at a predetermined temp., analysed at a olled pH, then re-introduced into the container through an re in the cover.
re-introduced juice is evenly distributed over the top surface cabbage by passing it through a porous membrane or sieve-ate contg. holes above the cabbage.

★ D13 03650 D/03 ★US 4242-362
type cheese prodn. - by salting curd in supersaturated brine, orce drying with high velocity air
IGSBY C O 27.07.78-US-928386
12.80) A23c-19/02
8 as 928386 (4pp478)
nown mfr. of cheese (I) with eyes formed in it (i.e. Swiss cheese) ch: (a) milk is clarified to remove sediment; (b) standardised to m fat content 2.5-3.5%; (c) set with inoculants and coagulants rd which is cut; (d) cooked at 100-135 deg.F; (e) sepd. from the (f) hooped to shape it to the desired form (alternatively d and turned to removed formed holes or cavities); (g) salted lt brine soln. for 2-4 days at 50-60 deg.F; and (h) cured for 60 o 6 months is improved as follows: (i) the pressing of the curd is for 2-4 hr. at 80-130 deg.F; (ii) the salting is in a supersatd. salt brine (above 85% salinity) for 0.5-4 hr. at 80-130 deg.F; (iii) the curing of the curd is effected by ageing the cheese for 6-24 hr.: then (iv) the cheese is force dried using high velocity air at 90-300 deg.F for 1-60 min.
The improvements reduce the time required for curing the cheese, and result in more uniform eye formation. In addn., the salt or Na content to control the eye formation is reduced, and the cheese has improved flavour and texture.

INRG D13 18062 B/10 =US 4242-363
Orotic acid and urea feedstuff additive - allows greater amts. of urea to be incorporated in ruminant feed without toxic effects
INST NAT RECH AGRON 27.10.77-FR-032842
*C02 (30.12.80) *BE-871-560 A23k-01/22*
26.10.78 as 954774 (6pp945)
Supplement for mixing with the feedstuff of herbivorous animals comprises urea or its deriv. as a source of nutritive nitrogen and ca. 5-100 mg. orotic acid per g. of nonprotein nitrogen in the urea (deriv.).
The supplement may be in powder or granular form for physical mixing with the feedstuff. It is pref. incorporated at 5-25 g. nonprotein nitrogen per kg. feedstuff.
The orotic acid increases the rate at which ammonia, produced by urea ureolysis by microflora in the rumen, is assimilated. This prevents ammonia build-up in the rumen which is the cause of disorders due to excess urea. Only a small amt. of expensive orotic acid is required.

RGBL- D13 46673 C/27 =US 4242-364
Dried solid particles of liq. fat encapsulated in carbohydrate matrix - for use e.g. as coffee whitener or milk or cream substitute
RGB LAB INC 19.12.78-US-970938
*A97 (A26) (30.12.80) *EP--12-499 A23c-11/02*
19.12.78 as 970938 (10pp931)
Dried, solid, liq. fat-contg. coffee whitener or liq. dairy prod. replacement food particles comprise flowable fat particles of dia. 3 microns or less and an encapsulating matrix around each particle.
The matrix comprises at least one emulsifier and carbohydrate of D.E. 10-70, e.g. corn syrup, wheat syrup, syrup, and/or their in opt. mixt.
The food particles have a stability such that a 25 vol.% dispersion in water stored at 40 deg.F for 72 h. exhibits 20% or less fat-water phase sepn; 0.36 g. of fat dispersed in 50 ml. of black coffee at 175 deg.F gives a relative reflectance of at least 50% using a standardised reflectometer; 3 g. of the particles added to 50 ml. of the coffee in a container of 5 cm. dia. followed by gentle stirring and 2 mins. standing exhibits 10 oil droplets or less on its surface; and no pptn. or flocculation after 5 mins. standing and only a moderate amt. of feathering.

MEIJ ★ D13 03651 D/03 ★US 4242-365
Dried, fried banana slices prepn. - from fully ripe, raw flesh by controlled frying in vacuo
MEIJI SEIKA KAISHA 11.07.77-JP-081934
(30.12.80) A23l-01/21
12.09.79 as 074622 (+11.7.78-US-924012) (5pp478)
Dried banana (I) prod. is prepd. as follows: (a) fully ripe, raw banana flesh slices (thickness 1-5 mm) are fried (as rapidly as possible after slicing but within 20 min.; without prior treatment with a browning inhibitor) at 75-85 deg.C/30-60 Torr; (b) the (I) slices are sepd. from the oil at 30-60 Torr; (c) excess oil adhering to the (I) slices is removed, still at 30-60 Torr; and (d) the pressure is returned to atmos.
Process using reduced pressure affords a (I) prod. which has a superior flavour, a crisp texture, and good storage stability from fully ripe (I) flesh without the use of a browning inhibitor.

MERI D13 59124 C/34 =US 4242-367
Gum compsn. for stabilising milk prods. and desserts - comprises guar, xanthan, carrageenan and opt. locust bean gum
MERCK & CO INC 26.01.79-US-006611
*(30.12.80) *GB2039-712 A23g-09 A23l-01/04*
26.01.79 as 006611 (2pp931)
A stabiliser blend of gums for use in milk shakes and soft serve frozen milk desserts comprise 53-68 wt.% of guar gum, 20-35 wt.% of xanthan gum, 9-13 wt.% of carrageenan, and 0-5 wt.% of locust bean gum.
Pref. the blend comprises 62.63 wt.% guar gum, 25.95 wt.% xanthan gum, 10.52 wt.% carrageenan and 0.90 wt.% locust bean gum.
The blend is esp. used at a level of 0.14-0.25% (pref. 0.17-0.20) by which milk shake mixes may be stabilised for 10 days, the time depending on the amt. of carrageenan used.

FIRE D13 41500 C/24 = US 4242-499
Poly:organo:phosphazene(s) contg. a chromophoric gp. - useful for prodn. of coloured fibres and films and as food colourings
FIRESTONE TIRE & RUBBER 27.07.79-US-061410 (12.05.77-US-796073)
*A26 E24 F01 (A89 A97) (30.12.80) *BE-880-132 + C07c-46 C07c-57 C08g-79/02*
27.07.79 as 061410 (+ 21.9.78-US-944572) (7pp936)
Poly(organophosphazenes) of formulae -(N:P(X)(R)-N:P(R)2)n/2-(I) and -(N:P(R)2-N:P(R)2)m/2.(HX)m (II) are new. In the formulae, X is a chromophoric gp.; R is organo substit.; n is integer 250-20000, and m is integer up to n/2. Further cpds. where ratio X to R is 1:1 to 1:15000 are also new.

Pref. R is opt. substd. alkoxy, aryloxy, aralkoxy, alkar (di)alkylamino, (di)arylamino or alkyl-arylamino. Pref. X i gps. derived from azo-, nitro-, ketone amine-, anthraqu acridine-, triphenylmethane-, oxazine-, phthalocyanine-, in and S dyes.
Prods. are used to add colour to phosphazene polymer produce food colourants, coloured films, coloured fibres etc.

See Also

D15 DS 2436858 D15 EP--20678 D16 J8 004983
D16 J8 0049837 D16 SU 732387 D16 SU 732389
D16 US 4242458 D23 J5 5145789 D23 US 424228

D14: FOODSTUFF MACHINERY

LAMB- ★ D14 02044 D/03 ★BE-884-951
Liq. extractor for extracting liq. from solids - comprising receiver contg. pressing mechanism and vertical filter elements in form of tubular sleeves with internal bracing
ETAB LAMBERT A CIE 27.08.80-BE-884951
J01 (16.12.80) A23n B01d
27.08.80 as 884951 (25pp1192)
An extractor of liq. from solid materials comprises a receiver for the solid materials, a number of filter elements disposed vertically in the receiver, a support and a component for pressing the filter elements. The filter elements comprise a tubular sleeve in material permeable to the liq. and a bracing inside the sleeve extending over the whole length of the sleeve.
The field of application is in the sepn. of the liq. phase of fruits or the sepn. of solid materials, gravel, mud, dust in wash waters in mining operations. The invention remedies inconveniences of existing separators, partic. the limited filtration surface, filter mass and pressing time and the lack of automation. It gives a larger filtration surface than existing systems, exerts a slow and progressive pressure, distributed over a large part of the mass being filtered and gives a higher proportion of extracted material.

BROW- ★ D14 D/03 ★BR 8002-964
Equipment for extraction of peel oil - from non-spherical citrus fruit
BROWN INT CORP 14.05.79-US-038668
(23.12.80) A23n-15/06 C11b-01

VAND- D14 05459 C/04 = EP --21-507
Agitating boiler esp. for defibering palm fruit kernels - has concave-faced, V/section, grooved agitators and ejectors
VANDEKERCKHOVE NV 19.06.79-BE-877078
*(D23) (07.01.81) *BE-877-078 + A23n-01/02 B01f-07/18 C11b-01/04*
12.06.80 as 120680 (12pp1014) (E) FR2175517 FR1361011 FR--37186 US3450356 E(DE FR GB IT LU NL)
The vertical cross-section of the agitating arms carried by the vertical shaft of a processing vessel, has a V-form tangential to the direction of rotation, with the point of the V aligned in the direction of rotation of the arms. The vessel has fittings for the introduction and extraction of the goods, and the agitator arms project radially and horizontally, at least two levels. Below, ejector arms are provided..
Esp. used for the treatment of coconuts after separation from bunches, before pressing oil from the kernels. The design of the agitator balances out the axial loading of the driving shaft and ensures a more efficient separation of the fibres, etc. without damage to the kernels. The inward scooping effect reduces wear on the vessel wall considerably.

JOHN/ ★ D14 02734 D/03 ★GB 2050-806
Appts. for continuous treatment of particulate material - with vertical screw conveyors creating pressure change along flow path
JOHNSTON J S 16.05.79-GB-017104
P41 Q35 (14.01.81) A23l-01 B02b-05 B65g-33/08
16.05.79 as 017104 (7pp295)

Flowable particulate material is treated with a flui superatmospheric pressure. The material is continuously fed t inlet of a conveyor which has a vertical component along a portion of its path. Thus the pressure in the material increases d both gravity and the conveying action. Treating fluid is introd along this first path portion.
The material is then passed along a second portion of the pa the conveyor which also has a vertical component. In this porti the path the pressure on the material progressively returns initial pressure. It is finally discharged.
The apparatus may be used in the food, pharmaceutical chemical industries for treatment of the material with a fluid temperature and pressure other than ambient. e.g., it is used fo pressure cooking of air-dried cereal grain. The method repla batch process which can cause an interruption in an other continuous process.

NITL D14 39915 B/21 = J8 004
Multi-pipe membrane liq. separator - for refining, concentrating recovering food liquids and juices
NITTO ELECTRIC IND KK 26.09.77-JP-115886
*J01 (15.12.80) *J54048-687 B01d-13*
26.09.77 as 115886 (6pp26)
Porous support pipes are juxtaposed between end support plates bolted to them with nuts. A tubular membrane for reverse osm or ultrafiltration is inserted into each porous pipe after assemb the unit of pipes. They are connected to each other end to end, forming a meandering passage for liq. flow.
If one end plate is unbolted, access to the inside of the un possible, enabling easy cleaning and replacement of the membr (J54048687).

STOE- D14 55454 C/32 = US 424
Ice cream mixing worm - with spiral strip first backwardly and forwardly inclined against radial plane
STOELTING INC 19.01.79-US-004639
*+ Q75 (30.12.80) *DE3000-882 A23g-09*
19.01.79 as 004639 (6pp1376)
Freezing barrel of a freezer has an auger ribbon flight helix ha an outward skew diverging from a radial plane to thru comestible in the barrel towards the barrel wall, and a blending in the helix. The helix has a part with an inward skew diver from the radial plane towards the bar to thrust the comes toward the bar.
Heat is more rapidly removed.

See Also

D15 J8 0049900

D15: WATER TREATMENT

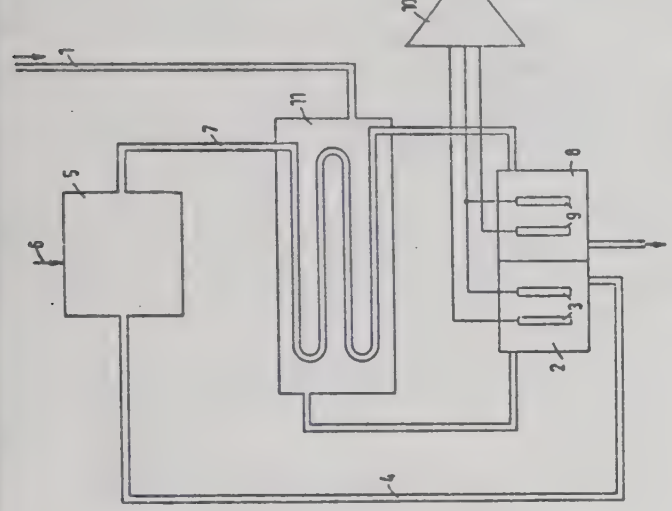
WYSS ★ D15 D/03 ★BR 8003-116
Decantation sludge mfr.
ESCHER WYSS GMBH 28.05.79-CH-004191
(23.12.80) C02f-11/12

METG ★ D15 02070 D/03 ★CA 1091
Appts. for waste water treatment by flocculation - with strean potential adjusted by addn. of mineral acid and metal coagulant
DRAVO CORP 11.02.77-US-767817
(16.12.80) C02c-05/02
23.12.77 as 293867 (29pp295)
Particulates are removed from waste water by flotation. streaming potential of the particulates in the supply of waste w

ted to approx. zero by the addn. of a multivalent metal nt in combination with a mineral acid.
ater is passed through a confined flow path where dense es of small bubbles are supplied. This forms embryo flocs re fed with the waste water into a long flotation zone. Here d flocs form which are removed from the water.
ppts. is used for treating waste water esp. that from meat- plants and edible oil plants. The appts. uses lower concns. of tivalent metal coagulants to form skimmings that are renderable, of increased solid to liq. ratio, and of reduced skimmings also have an improved colour and odour.

D15 02091 D/03 ★DE 2924-285
e ion determn. in aq. soln. - by electrical conductivity ement before and after reacting with selective complexing

IENS AG 15.06.79-DE-924285
303 (08.01.81) G01n-27/08 G01n-33/18
as 924285 (8pp016)
ement of the concn. of ions or ion gps. in aq. solns. involves suring the electrical conductivity of a sample stream taken ie soln., (b) adding a reagent (I) selective for the ions ed, which changes the conductivity according to the ion (c) measuring the conductivity at the same temp. as in (a) e reaction and (d) representing the difference in conductivity as an index for the absolute content of the ion concerned in the stream.
pref. a complexing agent forming inclusion cpds. with the sp. 4,7,13,16,21-pentaoxa-1.10-diazabicyclo-(8,8,5-tricosane, 3-tetraoxa-1,10-diazabicylco-(8,5,5)-eicosane or 4,7,13, -hexaoxa-1,10-diazabicyclo-(8,8,8)-hexaconsane.
nethod is suitable for the selective determn. of very small in aq. solns. , e.g. monitoring breakthrough of Na ions in the hange treatment of salt water. It is suitable for continuous rm operation with great maintenance or calibration ls.



★ D15 02156 D/03 ★DE 2926-103
non-aq. dispersion of water-soluble polymer - contg. fatty acid alcohol ethoxylate, sorbitan fatty acid ester and dispersing

ER AG 28.06.79-DE-926103
F09 H01 (A14) (08.01.81) C08f-02/32 C08f-20 C08l-33/26
as 926103 (20pp200)
sions contain (a) 45-60 pts.wt. water-soluble polymers, (b) 25-45 dispersing oil, (c) 3-8 pts.wt. sorbitan fatty acid ester and (d) wt. ethoxylation prods. of fatty acids and/or fatty alcohols, d sum of components (a) to (d) is 100 pts.wt.
dispersions can be used as flocculants in waste water ng as retention- and strengthening agent in paper mfr., as auxiliary and as flooding additive in tert. petroleum ance.
ddn. of (d) in the presence of (c) in oil-phase forms dispersions ing a high solids content but resisting storage for several without polymer settling; (ii) having lower viscosity than d dispersions having the same polymer content, and (iii) ing quickly in water without aggregation.

★ D15 02235 D/03 ★DE 2927-802
water flocculation treatment - precipitates fine flocks by pipe concentric to stand-pipe
LL H ' 06.07.79-DE-927802 (00.00.78-DE-811800)
01.81) C02f-01/52
as 927802 Add to 2811800 (15pp39)
rent Patent 2811800 described a system of clarifying surface te water by sedimentation after the addn. of a flocculant, in he clarified water was discharged by overflow into a central ipe. A concentric pipe has now been added around the ipe, with three or four horizontal slots through which the water must enter before it can ascend to the overflow. The width of the slots increases preferably downward to ensure the ingress of equal amounts of water.
This ensures that the water moves horizontally in all layers right up to the standpipe. This ensures that even smaller flocks have time to become deposited.

DOWO ★ D15 02246 D/03 ★DE 3016-306
Reverse osmosis cell for desalination - having high and low pressure chambers with counter current water flow along sides to give solute concn. gradient
DOW CORNING CORP 29.06.79-US-053587
J01 P34 (08.01.81) A61m-01/03 B01d-13 C02f-01/44
28.04.80 as 016306 (18pp1053)
Reverse osmosis cell changes the proportion of solute to solvent in solns. The cell has two chambers sepd. by a semi-permeable membrane but connected in such a way that a reflux stream of soln. occurs. The pressure in one chamber is higher than the other. No backmixing occurs with the membrane when two of the components have different permeability constants.
The system has means of maintaining the pressure differential between the chambers across the membrane. It has at least one inlet for the feed and one outlet to remove concentrated soln. There is a separate outlet for the solvent rich stream.
Used for desalination of seawater. Allows the relative solute concentrations to be controlled for various temps. and pressures.

KATS/ ★ D15 02265 D/03 ★DE 3022-148
Solid bowl screw centrifuge - with clarified liq. collecting axial tubes
KATSUME H 05.07.79-JP-084439
P41 (08.01.81) B04b-01/20
13.06.80 as 022148 (21pp39)
A solid bowl centrifuge, specially for the continuous separation of mixtures of water and sludge extracts the clarified liquid through axial tubes along the roots of the screw turns with an inlet between the restrictor disc at the end of the cylindrical bowl and the pulp inlet. The differential speed of screw and bowl and/or the feed rate of the solids in the pulp is controlled by a parameter such as the torque of the screw conveyor or the solids content in the discharge of solid or liquid component.
This centrifuge combines a maximum of effect with the best possible clarification. It maintains an optimum function inspite of fluctuating operational conditions. The application of a computer control is facilitated.

APOT D15 02042 W/02 =DS 2436-858
Recovery of stabilised fatty sludge - from aqueous effluents containing fatty substances e.g. food plant effluent
APOTHEKERNES LAB FU A/S 28.01.74-NO-000247
*(D13) (08.01.81) *BE-818-384 C11b-13*
31.07.74 as 436858 (5pp68)
Fatty material is recovered from waste water as fatty acids opt. together with the chemicals used in the process. First the waste water contg. the fat is adjusted to a pH of 5.0 or lower with aluminium or ferric ions and pptn. caused by raising the pH to at least 6.0 in presence of alkaline earth metal ions. The pptd. material is sepd. e.g. by flotation and the resulting slurry acidified to a pH below 2.0 so that two phases are formed, i.e. a lower aq. phase and an upper conc. fat phase, which is sepd. and heated to form an upper phase contg. fatty acid and a lower aq. phase contg. the pptn. chemicals.
The fatty acid phase is sepd. and the aq. phase may be treated to recovery the chemicals or recycled. The process is economical and may be used to recover fat from margarine or fat refining waste water.(US)

HUBE- D15 68104 Y/38 #DS 2716-069
Drive for stirrer to aerate effluent - with the power transferred via one large gear to reduce breakdowns
MACH HUBERT W & CO 01.03.76-NL-002118 (09.04.77-DE-716069)
*+Q64 (08.01.81) *NL7602-118 B01f-13/02*
09.04.77 as 716069 (5pp39)
Drive for the agitator of a sewage clarification plant, specially for a revolving aerator, is based on a toothed rim which is bolted to a rotary table carrying the coaxial tubular drive shaft of the aerator. This rim also reprresents the outer face of a large-diameter ball bearing which is supported by a bridge, surrounding the rotary table and the drive pinion meshing with the toothed rim. This bridge can be moved in a vertical direction by several screw jacks which are driven by chains from a servo motor.
This creates an aerator which is easily adjustable in height, and a bearing which can absorb large impact forces.(DS)

GARC/ D15 05441 C/03 =EP --20-347
Ozone production in chemo-nuclear generator - esp. for waste or water treatment, using radioactive material in oxygen flow tubes
GARCIA R I 08.06.78-US-913699
*E36 K08 (07.01.81) *WP8000-009 C01b-13/10 G21g-01/12 G21h-05 + B01j-19/08*

DURD/ D15 23714 C/13 =EP --20-388
Waste water treatment with propeller type aerator - which both aerates and mixes and creates individual circulating flow pattern
DURDA D J 17.08.78-US-934412
*(07.01.81) *WP8000-435 + C02f-01/72 C02f-07*
17.08.79 as 901064 E(DE FR GB)
(WP8000435)

PROJ- D15 34573 C/19 =EP --20-510
Solar powered sea water desalination plant - with gravity circulation of sea water through solar panels and flash evaporator
PROJECTUS INDUSTRIP 18.10.78-SE-010875
*J01 (J08) (07.01.81) *WP8000-833 C02f-01/04*
12.10.79 as 901371 E(FR)
(WP8000833)

METR- D15 41494 C/23 =EP --20-639
In/line distillation system for sewage treatment - separates volatile components entrained in liquid
METROP SANIT CHICAG 16.11.78-US-961162
*J01 S03 (07.01.81) *WP8001-108 B01d-03 B01l-11 G01n-31/12 G01n-33/18*
05.11.79 as 901640 E(AT CH DE FR GB LU NL SE)
(WP8001108)

SERS- D15 45094 C/25 =EP --20-661
Water desalination process by electrochemical oxidn. of salt - then pptn. of chlorate and perchlorate as potassium salts
SERSEN SOC ETUD REC 01.12.78-FR-034004
*J03 (07.01.81) *WP8001-161 C01b-11/18 C02f-01 C02f-01/46 H01m-08/18*
30.11.79 as 901665 E(CH DE GB NL SE)
(WP8001161)

BODE/ D15 41479 C/23 =EP --20-678
Treating sludge with Lactobacillus and carbohydrate - to reduce pH and kill pathogenic bacteria, giving prods. useful as animal feed, fertiliser and landfill
BODENRADER B J 27.11.78-US-963675
*C04 (C03 D13) (07.01.81) *WP8001-067 C02f-11/02*
16.11.79 as 900028 E(GB)
(WP8001067)

HOOK D15 49829 C/29 =EP --20-735
Solid fuel prodn. from waste-water sludge - by processing in mill directly heated with flue gas from combustion of prod. fuel
HOOKER CHEM & PLAST 27.12.78-US-973770
*H09 + Q73 (07.01.81) *BE-880-910 F23g-05/04*
21.11.79 as 900167 E(FR)
(WP8001407)

CHEM- ★ D15 02366 D/03 ★EP --21-470
Aeration rotor for liquids - with tubular elbow blades revolving between stator ring plates
CHEMAP AG 01.06.79-CH-005124
(07.01.81) B01f-13/02 C12m-01/06
19.05.80 as 200463 (10pp39) (G) AT-189148 AT-193331 DE-863656 DE2207144 GB2001252 E(AT CH DE FR GB IT LI SE)
A device to introduce gas into a liquid, esp. an oxygen-contg. gas into a fluid for the aerobic growth of microorganisms or for an intensive sewage treatment, consists of a stirrer on a vertical revolving shaft. The stirrer is a rotor with two or four 90 deg. pipe elbows. The rotor revolves between an upper and a lower ring plate of the stator. The lower ring plate has on the periphery several welded baffle plates with an angle of incidence of 30 deg..
This hollow stirrer requires a minimum of power and achieves an excellent aeration of the liquid.

ICIL ★ D15 02410 D/03 ★EP --21-570
Waste water treatment by continuous recirculation - with introduction of oxygen to circulating water
IMPERIAL CHEM INDS LTD 23.05.79-GB-017971
(07.01.81) C02f-03/22
06.05.80 as 301470 (16pp295) (E) FR2328503 US2374772 E(BE DE FR GB IT NL SE)
Waste water is treated by circulating it around a system which comprises a downcomer and a riser communicating at their lower ends. The water level in the downcomer is maintained a level in the riser to provide a hydrostatic pressure hea causes the circulation at a predetermined rate.
An oxygen-containing gas is supplied as the water passes the downcomer. The water is pumped from near the top of back into the downcomer above the highest level to which t level in the downcomer can fluctuate during normal operati system operating at maximum load..
The apparatus is used for the secondary treatment of was which may be biologically degradable domestic or industria

ICIL ★ D15 02411 D/03 ★EP
Oil dispersant compsn. - comprises a cpd. contg. po residues, a nonionic surfactant and a solvent
IMPERIAL CHEM INDS LTD 22.05.79-GB-017708
A97 H03 (07.01.81) B01f-17/42 C09k-03/32
06.05.80 as 301471 (14pp959) (E) DE1911943 DE2018798 US DE2454932 DE2558907 DE2626552 DE2704067 AT-329722 A E(BE DE FR GB NL SE)
Oil dispersant compsn. comprises (1) at least one cpd. contg. 3 polyglycol residues (each residue comprising 10-40 (pre propylene oxide residues, 3-40 (pref. 5-25) ethylene oxide r and 15-60 propylene and ethylene oxide residues in to polyglycol residue); (2) a non-ionic surfactant chosen from condensn. prod. of propylene and/or ethylene oxide with a alcohol; (b) a 4-16C alkyl phenol; (c) a 10-20C carboxylic acid; a 10-20C amine or amide; (a)-(d) having one or two function each of which is condensed with 2-20 propylene and/or e oxide gps.; and (3) a solvent for (1) and (2) which is miscible wit
The compsn. is useful for dispersing oil spillages at sea a cleaning tanks.

ICIL ★ D15 02414 D/03 ★EP
Nebulising liquid with recycling of large droplets - giving n nebulising rate feeding detector measuring COD of waste wat
IMPERIAL CHEM INDS LTD 08.11.79-GB-038803 (16.05. 016953)
J04 S03 P42 (07.01.81) B01f-03/04 B05b-01/28 G01n-01
08.05.80 as 301514 (37pp295) (E) DD--81391 DS1652369 GB US3580680 DD--64326 E(DE FR GB IT NL)
Waste water is supplied to a nozzle where a gas nebulises the The resultant aerosol passes along a conduit and a port delivered to a detector which measures the concentratio component of the waste water. Typically the detector ionisation chamber which measures the COD of the waste wat
The conduit includes a sump which collects liquid which h been nebulised. This liquid is mixed with the feed liqui recycled. When the apparatus has reached equilibriu nebulisation rate balances the feed rate..
The apparatus provides a continuous monitor of the COD of water optionally mixed with sulphuric acid or ammonium sul The nebulising rate of all components of the waste water is when the apparatus is in balance.. Thus the detector reading distorted by the presence of highly volatile components.

HAWK ★ D15 02415 D/03 ★EP
Water screen comprising travelling band of panels - with sealing fins sliding in grooves to prevent by/pass of water
HAWKER SIDDELEY BRA 08.06.79-GB-020034
(07.01.81) B01d-33/32
09.05.80 as 301519 (15pp295) (E) NO-CITNS. E(BE DE FR GB NL)
An apparatus for screening liquids consists of a closed band o screening panels pivotably linked together. The band is r along its own length. A rigid groove is formed parallel with edge of the band.
A flexible sealing fin is provided on each side of each panel are sealed to their appropriate panels along their whole length other edges of the fins are received in the grooves with a s sealing relationship. Each fin is in sealing relationship with th on the same side of the two adjacent screening panels throughc whole range of relative pivoting of the panels..
The apparatus may be used for screening solids contaminated liquids such as sewage or a industrial effluent contaminated liquid cannot bypass the screen.

ALBA- ★ D15 02420 D/03 ★EP
Mfr. of coreless hollow filament bundle for separator modul looping filament around arms of rotating spiders
ALBANY INT CORP 28.06.79-US-052747
F02 J01 Q36 (07.01.81) B01d-13 B65h-54/56 B65h-81
13.05.80 as 301566 (11pp67) (E) US3391042 FR2380362 E(AT BE C FR GB IT LI LU NL)
Coreless hollow filament bundle for use in a separator mod made by rotating co-axial spiders having angularly spaced fil receiving arms in the same direction as each other and traver continuous hollow filament to and fro between the spiders. filament is looped around an arm on one spider and around a

other spider alternately to form a series of lengths of filament
en the spiders.
essive lengths lie along left handed and right handed helices
ately until the lengths of filament have built up in layers into a
ss bundle with the lengths of filament lying on oppositely
d helices having multiple cross over points with each other..
is bundle the fluid flow outside the filaments has equal access
surfaces of all the filaments because they are wound helically
traverse, so that they extend from one end of the bundle to the
while passing circumferentially around the bundle.
sive lengths of filament cross each other with only a point
t at the cross over and with a network of fluid passages
en the filaments.

★ D15 02577 D/03 ★EP --21-911
ng decontamination effluent contg. radioactive ions - by addn.
rogen peroxide, then alkali and sepn. of ppte
MMISS ENERGIE ATOMIQUE 14.06.79-FR-015273
(07.01.81) G21f-09
0 as 400790 (16pp597) (F) FR2031844 1.Jnl.Ref E(BE DE GB IT

ffluent, particularly from nuclear reactors, of the type
ising permanganate, phosphate and sulphate ions and
ctive Mn, Cr and Co ions, is treated by addn. of hydrogen
de to reduce the permanganate ions, adjusting the pH to at
2, sepn. of the ppte. formed, followed by adjusting the pH of
uid for its disposal to the environment. The process is carried
an appts. comprising a 1st. vessel for peroxide addn. with
to adjust the liquid redox potential; a 2nd vessel with alkali
salt addn. means, and a 3rd vessel for acid addn. after means
g. the ppte..
process enables satisfactory decontamination of the liquid to
ne radioactivity with the sludge which is sepd. in a good concn.

D15 01946 D/02 =EP --22-072
of aq. sludge, e.g. from waste water treatment - by electro-
c filtration assisted by progressively increasing hydrostatic
re
TTELLE-INSTITUT EV 05.06.79-CH-005191
*X25 (07.01.81) *WP8002-650 B01d-13/02 C02f-11/12*
0 as 810190 (16pp448) (F) DS-476144 DE1927740 NL--68314 CH-
GB1414564 DS-266971 GB-383199 DS-179086 E(BE CH DE FR
LI)
ess and a plant installation for concn. by dehydration of an aq.
. The process is of the type in which sludge is fed downwards
h a tubular passage which is vertical or steeply inclined to the
ntal. One wall of the passage comprises or consists of a porous
e. Also in longitudinal contact with sludge in the passage, an
is placed opposite and parallel to the cathode. The suspended
which develop a negative charge, migrate towards the anode
liq. is pushed towards and through the porous cathode by
-osmosis.
sludge is now advanced continuously through the passage. In
ay, the sludge is subjected to a progressively increasing
tatic pressure which assists in pressure filtration of the
The porous cathode pref. comprises a perforated metal
overed with a filter sheet with very fine perforations, i.e.
n 10 and 100 microns.
anode pref. forms another wall of the passage and is of
, perforated construction to the cathode. The anode is thus
release gas arising from electrophoresis whilst retaining
ded particles inside the passage.
ilter sheets are pref. sections of endless bands which are
continuously through the passage in the same direction as the
The electric field between anode and cathode pref. has a
gradient of between 10 and 70 V/cm..
dration of aq. sludge, e.g. sludge arising from treatment of
water, from treatment of mineral ores such as bauxite, from
gravel pits and from the mfr. of paper.
icity and economy coupled with efficient filtration
red by blinding of filter sheet.

★ D15 02667 D/03 ★EP --22-120
ng and working up fat and oil emulsion - by adding to
cal waste water sludge after acid but before anaerobic
tation
EST-ALPINE AG 28.06.79-AT-004556
01.81) B01d-17/04 C02f-03/28
as 890054 (15pp200) (G) GB2007205 FR2041483 US1753641
665 E(BE DE FR LU NL SE)
fat emulsions are broken and worked up together with waste
sludges by a process in which an emulsion is added to an
ed sludge or sludge liquor, e.g. from biological waste water
ation, after a first putrefaction process phase in which acid
tation takes place with organic acid and carbon dioxide
tion. The mixt. obtd. is subjected to a second putrefaction
phase under anaerobic conditions, in which methane is
ted in a medium different from that of the first phase. The
two putrefaction process phases are carried out in two different fermentation tanks and the emulsion is added to the second fermentation tank..

The process is used for breaking synthetic oil emulsions, e.g. cutting, cooling and lubricant fluids and sulphur or chloride salt-contg. oils, opt. in the presence of emulsifiers and spent wash liquors and degreasing baths.

Phosphates, nitrites, sulphur and carbon-contg. substances are worked up well. Emulsion processing time and energy consumption are reduced.

CARB- ★ D15 02680 D/03 ★FR 2451-771
Neutralising alkaline effluent with carbon di:oxide gas - which is contacted by descending, turning film of effluent
CARBOXYQUE FRANCAIS 20.03.79-FR-006974
(21.11.80) B01f-03/04 B01f-05/10
20.03.79 as 006974 (11pp448)
Thin film of the liq. is introduced into an atmos. of the gas held at a pressure above atmospheric in a contacting vessel. As the film falls through the vessel it is turned by oppositely inclined baffles to present changing surfaces to the gas.

Pref. the contacting vessel is a vertical, cylindrical column. Liq. is fed to the top of the column to run down over a series of coaxial, conically dished plates arranged in pairs, convex side uppermost then concave side uppermost etc. The quantity of gas to be dissolved in the liq. can be controlled by adjusting the surface area of liq. film in contact with the gas and/or adjusting the temp. of the liq. and/or adjusting the gas pressure. The pressure of the gas can be automatically controlled w.r.t. the relationship between the pH values of the incoming liq. and the discharged liq. after saturation.

Provides satn. of a liq. with a gas etc. for the neutralisation of an alkaline effluent with CO2 gas. Such effluents occur commonly from food factories, concrete industry, etc.

URBA= ★ D15 02691 D/03 ★FR 2451-892
Activated sludge treatment plant to purify waste water - comprises tank contg. aeration chamber surrounded by decantation zone
URBAN ECONOMY RES 23.03.79-FR-007418
(21.11.80) C02f-01/24
23.03.79 as 007418 (17pp448)
Appts. is claimed for purificn. of waste water by treatment with aerated, activated sludge followed by clarification in a decanting chamber. A main outer tank is subdivided from top to bottom into a vertical aeration chamber and an adjacent decantation zone. The decantation zone has recycling connections into the aeration chamber and an outlet to discharge clarified water. The aeration chamber is surrounded by the decantation zone which is itself bounded by the outer wall of the main tank.

The decantation zone is divided into superimposed stages by parallel baffle plates inclined to the horizontal. Flow between stages passes between the lower edge of each baffle plate and the adjacent sidewall of the zone. The upper part of each stage has an outlet for clarified water.

The main outer tank is pref. in the form of a vertical cylindrical or rectangular cross-section tower. The width of flow passages at the bottom of each stage pref. decreases successively from top to bottom of the zone.

Simplicity and economy of construction. No pipework between aeration chamber and decantation zone. Activated sludge is kept in aerobic condition in the decantation zone. Depth of aeration chamber ensures efficient utilisation of air.

DEGM ★ D15 02692 D/03 ★FR 2451-894
Aeration tank for purificn. of waste water - uses submerged air diffusers independent of paddle rotor circulation (BR 18.11.80)
DEGREMONT SA 23.03.79-FR-007354
Q42 (21.11.80) C02f-03/20 E03f-05/26 E03f-11
23.03.79 as 007354 (10pp448)
An aeration tank employing activated sludge for the purificn. of biologically polluted waste water. The liq. in the rectangular tank circulates around a longitudinal, vertical partition which has passages between its ends and the ends of the tank. The tank has a system for aerating the water which is independent of the circulating system.

Circulation is by a multi-paddle, cylindrical rotor which turns on a horizontal axis at right angles to the partition. Aeration takes place at several points around the partition. The axis of the rotor is pref. at a higher level than the surface of liq. in the tank.

The rotor pref. has between 6 and 30 paddles spaced at a pitch of not less than 5 cm. The rotor pref. turns at a rate which rpoduces a rotor surface speed of 0.5 and 3.0 m/s.

Saving of energy compared with tanks in which the aerator also circulates the liq.. At periods when the substantially aeration can be reduced without affecting the rate of circulation.

GAGN ★ D15 02694 D/03 ★FR 2451-901
Dewatering sludges to solidify and harden them - using specified calcium silicate slag and hydraulic binder
GAGNERAUD F 22.03.79-FR-007246
L02 (21.11.80) C02f-11/12 C04b-23/04
22.03.79 as 007246 (6pp597)
The process comprises adding powdery metallurgical slags which have undergone disintegration brought about by allotropic transformation of calcium silicate (i.e. from the beta monoclinic form to the gamma rhombohedral form). The slag is in the form of a sand of particle size less than 100 microns and has a high specific surface. The process is applied to the consolidation of sludges using hydraulic binders, apt. setting agents and fine materials from dedusting appts.
Appreciably less hydraulic binders and setting agents are required and the process enables use of the dewatered sludge to form filling material, or granulates.

FMCC D15 19450 A/10 =GB 1582-569
Dissolved cyanurate separation from waste liquors - by making liquor basic and oxidising with sodium hypochlorite
FMC CORP 09.07.76-US-704051
*C02 E13 (C01 E12) (14.01.81) *US4075-094 + C02f-01/76*
08.07.77 as 028702 (10pp924)
Dissolved cyanurate cpds. are removed from aq. waste liquors by contacting the liquors at pH 8-12 with an aq. soln. of Na hypochlorite contg. at least 2 moles of Na hypochlorite for each mole of dissolved cyanurate cpd., for a time sufficient to oxidise the cyanurate cpds. to N2, CO2 and NaCl.
Pref. the liquors are pretreated with H2O2 to ppte. 65-98% of the cyanurate cpds., the ppte. then being removed before the liquors are contacted with the aq. Na hypochlorite soln. Pref. cyanurate cpds. are cyanuric acid and/or its water soluble salts. Pref. the liquors are maintained at 20-55 deg.C.
The levels of cyanurate cpds. in chlorinator waste stream can be reduced to less than 15 ppm.

PATE- D15 69900 B/38 =GB 1582-650
Flotation clarification process - includes pre-saturating or super-saturating and mixing with fine gas bubbles
PATERSON CANDY INT 13.07.77-GB-029385
*(14.01.81) *ZA7803-617 + C02f-01/24*
13.07.77 as 029385 (4pp1376)
Main water stream in a flotation process is pre or supersaturated and then mixed with fine gas bubbles released from re-cycled water which has at least partially saturated with gas at above atmos. pressure.
Pref. prior to mixing the main stream is bubble free. Mixing with the fine bubbles pref. occurs after feeding the main stream to the floccuation zone.
The recycled flow can be kept constant.

GOME/ ★ D15 02715 D/03 ★GB 1582-701
Valve actuator for carbon di:oxide cylinder used to carbonate beer - has sliding piston for engaging projecting needle in cylinder outlet valve
GOMERSALL R 03.02.77-GB-004391
(14.01.81) B01f-03/04 B01f-15
17.04.78 as ------ (7pp67)
Valve actuator for connection between a pressure vessel and a container to control the transfer of pressurized fluid into tbe container comprises a coupling which is secured to an outlet valve on the pressure vessel having a bore with a sliding piston. As the piston slides it engages a projecting needle in the outlet valve and so controls operation of the valve.
Used in home brewing for controlling the release of CO2 from a carbonating cylinder when carbonating beer. Use of the actuator avoids the need to use a fresh carbonating cylinder for each carbonating operation.

FREU D15 42402 A/24 =GB 1582-790
Semipermeable matted fibre diaphragm - has face of matted web provided with layer of thermoplastics particulate material calendered into face
FREUDENBERG C 04.12.76-DE-655024
*A88 F04 J01 + P73 (14.01.81) *DE2655-024 B32b-03/10*
02.12.77 as 050216 (2pp1376)
Fibrous carrier for a semi-permeable membrane consists of a bonded non-woven fabric into which a layer of thermoplastic particles applied by electrostatic spraying have been calendered. The particle size and quantity result in a smoother surface than the fabric. Prior to calendering the particles are ribbon-like and have a min. dimension of 30 microns.
Pref. the quantity of particles is 10 to 40 gms/square metre. The fabric is pref. made by a wet-lay process.
Carrier provides a smooth surface to the membrane.

ADOL/ ★ D15 02740 D/03 ★GB 2
Gasifying beverage - by injecting gas jet to hit container ba break up into bubbles
ADOLFSSON R F R 11.06.79-GB-020213
J02 (14.01.81) B01f-03/04 B01f-05/04
11.06.79 as 020213 (4pp1358)
A beverage is gasified in a container by injecting gas thr downwardly directed orifice with diameter, spacing from co base and gas pressure such that some gas reaches the base a and then rises as a large number of small bubbles. The orifice sufficient depth below the liquid surface to ensure that no drawn in.
Orifice diameter is pref. 0.25-0.35 mm. and gas pressure container is 6-8 bar. The apparatus includes a valve gas supply injection pipe, and a relief valve set at 6-8 bar for the space abo beverage. The method provides more efficient mixing and re gas loss.

ADOL/ ★ D15 02741 D/03 ★GB 20
InJection gasification of liquid - pressure in vessel directed a top to press against vessel mouth
ADOLFSSON R F R 11.06.79-GB-020214
J02 (14.01.81) B01f-03/04 B01f-05/04
11.06.79 as 020214 (4pp1358)
A liquid is gasified, e.g. water with CO2, by injecting gas downwardly directed pipe passing through a seal in the mouth vessel and pressing the seal against the mouth with force va with gas pressure in the vessel. The pressure in the vessel is brought to bear on an external larger surface of the seal pressure transmitting element connected to the seal.
The seal may be a rubber cone with a central passage aroun pipe such that pressure in the vessel acts on the larger upper su of the cone, or the pressure may be directed to a chamber wit wall acting as a piston and pressing on the seal. The arrangeme e.g. for domestic use.

BRPE ★ D15 02742 D/03 ★GB 205
Oil pick/up device - using rotatable discs with scrapers and h adjustable oil-collecting trough
BRITISH PETROLEUM LTD 16.05.80-GB-016299 (17.05.79 017178)
H03 Q42 (14.01.81) E02b-15/04
16.05.80 as 016299 (8pp1345)
An oil pick-up device has at least three discs mounted on a rotat shaft with a scraper or scrapers associated with each disc. A tr of adjustable height is associated with the scrapers. Floats associated with the shaft so that when the device is placed on w is floats with the discs partly immersed in the water. Guide char are positioned between the scrapers and the trough.
The trough is movable with an edge parallel to a plate forr part of the device's framework. The plate has guide slots thr which bolts on the trough project. The guide channels are rig attached to the trough and the scrapers are rigidly fixed to framework and flexibly attached to the guide channel.
By making the offtake adjustable, the hydrostatic head of th can be increased so that it alone is sufficient to remove oil from skimmer. Thus no pump is required.

VIZU- ★ D15 D/03 ★HU T01
Process and appts. for treating water streams - for remo dissolved gases, esp. methane and carbon dioxide, and disso salts, esp. iron and manganese salts
VIZUGYI TERVEZO 18.01.78-HU-RA0672
(27.12.80) C02b-01/10

KOTO ★ D15 02891 D/03 ★J5 514
Treating a waste soln. contg. radioactive material - by add calcium cpd. and opt. phosphate-, carboxylate- or sulphate source
KOTOBUKI KOGYO KK 28.04.79-JP-053176
A97 K07 (11.11.80) C02f-01/54 G21f-09/10
28.04.79 as 053176 (3pp86)
A water-soluble Ca cpd. opt. together with a cpd. capabl generating phosphate, carboxylate or sulphate ions is mixed w waste soln. contg. radioactive materials. The pH of the mixed is then adjusted to 5-10 and pptes. produced are removed.
In an example, a waste soln. contained 0.01 mol/l sulphamic 1.4 mol/l phosphoric acid, 0.3 mol/l sulphuric acid, 0.2 mol/l n acid, 0.01 mol/l ammonium molybdate, 0.004 mol/l vanad sulphate, 0.001 mol/l potassium dichromate and 3500 x 10 p minus 7 micro-c/cm U and had a pH of 2. 0.1 Mol/l of Ca hydro was gradually added and the pH adjusted to 8.2. A polyacrylar flocculant was added and pptes. removed. The concn. of U reduced to 1.4 x 10 power minus 7 micro-c/cm3.

★ D15 02949 D/03 ★J5 5145-175
ytic treatment of copper chloride etching waste - to recover copper, e.g. in printed circuit prodn.
AKU GIJUTSU SHIN 28.04.79-JP-052739
M14 (M28) (12.11.80) C23f-01 C25c-01/12 C25c-05/02 C25c-07
as 052739 (4pp121)
electrolytic treatment in which a copper chloride etching olution is reclaimed and also metallic copper is collected, the ement is that the cathode current density is 20-150 A/dm2. atment is carried out in an electrolysis appts. having anode(s) hode(s) with the proviso that the ratio of the cathode surface the anode surface area is up to 0.5. The cathode is pref. sed of graphite or Ti etc..
method is suitable for copper etching in printed circuit prodn. tallic copper deposits onto the cathode surface in a powdery us state, and the copper layer can be removed easily from the e, and also the electrolysis is carried out with a high current cy.

★ D15 02950 D/03 ★J5 5145-176
olytic treatment of waste copper chloride etching soln. - from circuit prodn., to recover metallic copper
GAKU GIJUTSU SHIN 28.04.79-JP-052740
M14 (M28) (12.11.80) C23f-01 C25c-01/12
9 as 052740 (3pp121)
electrolytic treatment of copper chloride etching waste n in which the soln. is reclaimed and also metallic Cu is ed by electrolysing the waste soln. in an electrolysing tank is sepd. into an anode compartment and a cathode rtment with a membrane, the improvement comprises that al amt. of cuprous ion and cupric ion in the cathode component up to 65 g/l (calculated as Cu).
purity metallic Cu is recovered and also the etching soln. is ned simultaneously.
example, an etching soln. contg. cupric chloride 40-45 g/l (as uprous chloride 25-20 g/l (as Cu) and HCl 90-75 g/l was olysed using a graphite plate as an anode and a Cu plate as a e, and metallic Cu contg. 1.35% Cl was obtd.

★ D15 02951 D/03 ★J5 5145-177
nent of alkaline etchant waste soln. contg. copper-ammonia by removal of copper as naphthenate, back extracting enate into dil. sulphuric acid and e.g. electrolysis of copper te soln.
GAKU GIJUTSU SHIN 28.04.79-JP-052741
M14 (12.11.80) C02f-01/26 C23f-01
9 as 052741 (4pp121)
ne etchant waste soln. contg. copper ammonia complex ions is ed by removing Cu by treating with naphthenic acid to t Cu as naphthenate. Naphthenic acid pref. has a carbon r 8-15 and an acid value of at least 200. The Cu naphthenate s back-extracted with dil. sulphuric acid soln. to produce enic acid and Cu sulphate. The Cu sulphate soln. is subjected se dialysis or electrolysis to obtain metallic Cu.
collected from waste soln. and alkaline etchant is reclaimed n be re-used. Treatment is suitable for etchant used in printed prodn. Cu is collected by a simple process, and Cu obtd. is of rity.

★ D15 02963 D/03 ★J5 5145-200
ng waste soln. exhausted from electrolytic polishing - by hydrofluoric acid soln. and caustic alkali or (acidic) alkali le to remove aluminium
TETSU MINING KK 02.05.79-JP-053413
1 (12.11.80) C02f-01/58 C25f-07/02
9 as 053413 (3pp135)
fluoric acid soln. and at least one of caustic alkali, alkali le and acidic alkali fluoride are added to a spent electrolytic ing soln. or waste washing water, so that Al can be pptd. as soluble Al fluoride such as Na3AlF6, K3AlF6, Na5Al5F14 or F9. The pptd. Al fluoride is sepd. from the soln. by filtering.
an be recovered with a high efficiency (approx. 97%). PPtn. of oride exhibits a good filtering property. Besides, filtered cake fluoride does not contain phosphoric acid and chromic acid. fined soln. can be re-used as an electrolytic polishing soln.

★ D15 02993 D/03 ★J5 5145-502
for desalination of sea water - comprises preheaters and rator units arranged in order of decreasing temp.
BCOCK-HITACHI KK 27.04.79-JP-051383
(13.11.80) B01d-01/26
9 as 051383 (7pp26)
e for evaporating a liq. such as sea water into potable water is ed. It comprises preheaters and evaporator units arranged ntally, where the temps. in the units are orderly decrease he first unit to the last, and the preheated liq. is fed into the from the first to the last. The object is to preheat the liq., ng the sensitive heat of a brine flowing in each evaporator unit.

Brine flash evaporators for flasb-evaporating a brine in the evaporator units are provided in the liq. feed line, where the liq. is preheated, to preheat the liq. by vapour of the brine from the brine evaporators and the steam produced from the preheater.

HITG ★ D15 02994 D/03 ★J5 5145-503
Appts. for desalination of sea water - comprises preheaters, evaporator units and condenser the evaporator units being arrange in order of decreasing temp.
BABCOCK-HITACHI KK 27.04.79-JP-051384
J01 (13.11.80) B01d-01/26
27.04.79 as 051384 (4pp26)
Device for evaporating liq. such as sea water into potable water is claimed. It comprises preheaters, evaporator units, and condenser. The liq. preheated by the preheaters is fed into the first evaporator unit having the highest temp. and flows from this unit to the next until reaching the last evaporator unit having the lowest temp. The liq. is evaporated during flowing, resultant vapour is condensed into water.
The object is to maintain the feed rate of the liq. to each evaporator unit, allowing its evaporating conditions to be set optimally. The novelty is in that the preheaters are connected to the evaporator units one-to-one, so that a part of the liq., preheated by each preheater is fed to corresp. evaporator unit having the same temp. as the preheater.

HITG ★ D15 02995 D/03 ★J5 5145-504
Multi-stage flash evaporator for e.g. sea water - has weirs near partitioning wall of each flash chamber to form passage for flowing the liq.
BABCOCK-HITACHI KK 27.04.79-JP-051385
J01 (13.11.80) B01d-03/06 C02f-01/06
27.04.79 as 051385 (5pp26)
A device for flash evapn. of a liq. such as sea water into a fresh water is claimed. A horizontal tank is partitioned into flash chambers arranged in horizontal. The object is to smoothly and efficiently flash-evaporate at a high prodn. rate of the fresh water.
The novelty is that a weir is located near the partitioning wall of each chamber to form a passage for flowing the liq., e.g. brine. The weir is inclined so that the upper horizontal area of the passage is larger than the lower horizontal area. The partitioning wall is vertical. An orifice is formed at a lower section of each partitioning wall.

NISH/ ★ D15 02997 D/03 ★J5 5145-507
Reverse osmosis device for mfg. fresh water from brine, etc. - has rod-shaped piston connected with booster piston, the top end being inserted in osmotic chamber to feed and drain liq.
NISHINO I 02.05.79-JP-053358
(13.11.80) B01d-13
02.05.79 as 053358 (3pp26)
A device for producing a fresh water from sea water or dirty water by the reverse osmotic method is claimed. A cylinder is partitioned into a piston chamber and reverse osmotic chamber. The latter chamber has a raw water feed port and drain port and contains a semi-permeable element communicated with a fresh water collector port. A booster piston is assembled in the former chamber. The object is to apply a pressure to the raw liq. by means of a small power drive structure.
The novelty is that a rod-shaped small-dia. piston is connected integratedly with the booster piston and the top end of the piston is inserted into the osmotic chamber to feed and drain the raw liq.

DAIC ★ D15 02998 D/03 ★J5 5145-509
Aggregation of suspension using biodegradable cpds. - i.e. anion type poly:glucose electrolyte and water soln. salt of chitin hydrolysis prod.
DAINICHISEIKA COLOR CHEM 27.04.79-JP-051358
A97 (13.11.80) B01d-21/ C02f-01/56*
27.04.79 as 051358 (3pp55)
Anion type polyglucose electrolyte and a water-soluble salt of a hydrolysed prod. from a chitin are added to the suspension one after another. The anion type polyglucose electrolyte is pref. CMC, carboxy methyl starch, alginic acid or their water-soluble salts (such as Na, K, NH4 salts etc.).
No matter how much of the two kinds of high molecular cpds. are added, good aggregation occurs. The high molecular cpds. show biodegradation and no toxicity thus waste water is easily controlled, and the aggregated prod. can be used as mucilage clay etc. This process being based on the formation of poly ion complex, does not require highly polymerised agents, nor cpds. with controlled molecular weight distribution.

KAWI ★ D15 02999 D/03 ★J5 5145-510
Floating type water collector - has winding gear for adjusting horizontal position of trough w.r.t. the water surface
KAWASAKI STEEL KK 01.05.79-JP-052541
(13.11.80) B01d-21/24
01.05.79 as 052541 (3pp26)
A device for collecting water from a sedimentation pond in a water purifying plant comprises a trough for collecting the supernatant from the pond and floats connected to the trough to float it on the surface of the water. The object is to accurately maintain the trough in horizontal position and easily fix the trough to the pond.
The novelty is that an adjuster for adjusting the horizontal position of the trough relative to the water surface. The adjuster comprises anchors, ropes and motor-driven winders for winding the ropes connected to the anchors thrown into the bottom of the pond so that the overflow side edges of the trough are held horizontal. Each winder is mounted on the float.

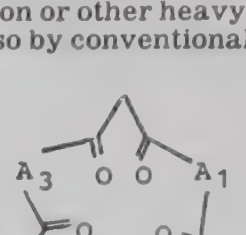
FUJI/ ★ D15 03000 D/03 ★J5 5145-511
Removing flocs from primary treated water - comprising tank connected to sand sedimentation pond and screen cages used to collect sludge
FUJII H 01.05.79-JP-054306
(13.11.80) B01d-23/02
01.05.79 as 054306 (3pp26)
A device for prim. treatment of dirty water comprises a tank connected to a sand sedimentation pond. The object is to remove sludge contained in the water drained from the sedimentation tank as a supernatant, witbout requiring labour. A cover board is laid over the tank. Holes are bored through the board. Cages baving desired meshes are hung over the boles into the tank. A raw water feed pipe connected to tbe pond is opened on the cover to allow the water to flow from tbe pond into the cages one after another, tbus collecting flock from the water. A screen is stretched across tbe downstream of the last cage. After tbe case fills with flocs, it is replaced witb anotber.

HITG ★ D15 03001 D/03 ★J5 5145-512
Dewatering sludge cakes formed in filter press - by coating filter cloths with material which helps prevent clogging of filter press
BABCOCK-HITACHI KK 27.04.79-JP-051380
(13.11.80) B01d-25/12 C02f-11/12
27.04.79 as 051380 (3pp26)
A metbod for dewatering sludge cakes formed in a filter press is claimed. The dewatered cakes are to be incinerated. Tbe object is to avoid clogging of the filter press even if a raw sludge water contains less fibrous components and easily separate tbe dewatered sludge cake.
The novelty is tbat before feeding a wet sludge into tbe filter press, a coating substance is fed into it witb pressure to previously coat filter cloths contained in tbe filter press witb the substance. Tbe substance may be a fibrous material or powder sucb as very fine powder of carbon to easily incinerate the dewatered sludge cake after draining it from the filter press. The substance is fed in a form of slurry contg. the substance.

MORI/ ★ D15 03002 D/03 ★J5 5145-515
Vacuum type press roll filter - comprising partitioned movable vacuum boxes, each having filter cloth support beds connected to vacuum source
MORITA M 01.05.79-JP-053695
(13.11.80) B01d-33/04
01.05.79 as 053695 (4pp26)
A vacuum type press roll filter is claimed for filtering industrial waste waters and slurry drained from sewage treating plants. It comprises a movable vacuum box partitioned into filter chambers, each having a filter cloth support bed and communicating with a vacuum source.
The object is to increase the dewatering degree of cake even for slurry agglomerated by high-molecule agglomerant.
Nozzles are disposed above filter clotbs put on tbe beds to spray a washing water over a first endless filter clotb borizontally laid sbove the beds. A second endless filter clotb is laid above the first so as to hold cake wetted by tbe water between both clotbs, wbicb are pressed by upper and lower press rolls.

MITQ ★ D15 03003 D/03 ★J5 5145-516
Waste water filter used for sludge sepn. - comprising encased cylindrical vessel forming annular space at reduced pressure and having spiral blade in tube
MITSUBISHI ELECTRIC CORP 02.05.79-JP-054345
(13.11.80) B01d-33/06
02.05.79 as 054345 (3pp26)
A device for sepg. a solid from a liq. is claimed. It is applicable to sludge sepn. from filtrate water in a waste water treating plant. The object is to avoid clogging of very fine grains (solid) in the device.
A filtering membrane is laid on a cylindrical vessel surrounded by a casing to form an annular chamber having reduced pressure between the casing and vessel. A cylindrical tube is disposed in the vessel with leaving a space (annular), where blade is mounted on the tube to strir a raw liq. by rotating until very fine solids laid on the inner surface of the memb removed.

TABU/ ★ D15 03013 D/03 ★J
Macrocyclic hex:one heavy metal capturing agent - e.g. fo ions, prepd. by reacting hex:one ring with polyme chloromethyl side gps.
TABUS I 28.04.79-JP-053025
A91 J01 M25 (13.11.80) B01d-15 B01j-20/26 B01j-45 C08f-0
28.04.79 as 053025 (6pp96)
Heavy metal capturing agent comprises polymer consi macrocyclic bexaketones of formula (I). A1, A2 and A3 are ( )n, and n is 1-10, and R1 and R2 are H or alkyl. Prepn. co allowing polymer baving chlorometbyl gp. in side cbain to re the large ring bexaketones of formula (I).
Tbe heavy metal capturing agent can rapidly and quanti capture uranyl ion or other heavy metal ions from dil. aq. sol if difficult to do so by conventional capturing agents.



(I)

EBAI ★ D15 03025 D/03 ★J5 5
Treating organic waste liq. contg. ammonia and phosphoric a adding magnesium cpd. and introducing into biological nitrif and denitrification vessel, adding coagulant etc.
EBARA INFILCO KK 01.05.79-JP-054520
(13.11.80) C02f-03/12
01.05.79 as 054520 (6pp34)
Conc. organic waste liquor contg. ammonia and phosphori etc., e.g. night soil etc. is subjected to purification treatm adding Mg cpd., e.g. Mg(OH)2, MgCl2 and MgSO4 follow introducing into biological nitrification and denitrification The greater part of phosphoric acid and a portion of am contained in the waste liquor are removed by formation of NH4 in tbe biological treatment.
This is followed by coagulant contg. cationic polymer coagu a slurry mixt. comprising the treated liquor and surplus followed by stirring to remove by adsorption (on flocculated fl the surplus sludge) colloidal BOD, COD and organic nit components contained in the treated liquor.
The biological denitrification treatment is effectively perfo under undiluted state as the formation of NH4MgO4 ppte. is effective under higher PO4(3-) ion concn. By this process, a inorganic coagulant to be used, e.g. alum etc. is largely decre and phosphoric acid concn. of the treated water is lowered com with that in prior art, thereby amt. of sludge to be genera decreased.

EBAI ★ D15 03026 D/03 ★J5 51
Treating organic waste liq. - contg. ammonia and phosphoric by first adding magnesium cpd. and biologically treating
EBARA INFILCO KK 01.05.79-JP-054521
(13.11.80) C02f-03/12
01.05.79 as 054521 (4pp34)
Conc. organic waste liquor contg. ammonia and phosphoric etc., e.g. night soil is purified by adding Mg cpd., e.g. Mg(OH) together with phosphoric acid or phosphate and then subjecti biological treatment, i.e. biological nitrification and denitrific treatments without any sepn. of settled NH4MgPO4.
It becomes unnecessary to provide solid-liq. sepg. vessel for of settled NH4MgPO4. Further ageing of settled NH4MgP carried out in the biological treating vessel to increase the gra size of the sediment, and the sedimentation reaction and the a reaction proceed excellently due to the fact that the waste liqu treated biologically under undiluted state, thereby retention tim the treating vessel) is increased 7-10 times cf. prior processes. W temp. is kept high. Settability of activated sludge flocs in the settling pond is improved due to the fact that NH4MgPO4 m sediment is contained in the activated sludge floc.

NIUA ★ D15 03027 D/03 ★J5 514
Cost treatment of waste water - contg. ammonium and sulphate and organic cpds., with addn. of calcium (hydro)oxide to sulphate, distn., incineration, etc.
NIPPON SPINDLE MFG KK 01.05.79-JP-052527
(13.11.80) C02f-01/02 C02f-09
01.05.79 as 052527 (6pp34)

provement comprises (1) adding an excess amt. of Ca(OH)2 or ptte. the sulphate ions as CaSO4 whicb is then filtered, and to the ammonium ions as ammonia; (2) contacting tbe filtrate n (1) with high temp. waste gas resulting from distilling off matters, e.g. ammonia etc. together with steam; (3) sending tn. residual liquor remaining in (2) to an incineration furnace erate under oxidising at 800-1100 deg.C to give ash composed of CaO, which is then recycled to step (1) for use as a portion eutralising agent.

lly (4) washing combusted waste gas contg. SOx resulting he decomposition of a portion of sulphate ion in step (3) with n a scrubber after passing through step (2) and if necessary in t. with ammonia-contg. gas generated in step (1), to adsorb the an ammonium salt, followed by recycling the ammonium ntg. washed soln. to step (1) to settle as CaSO4.

sulphate ion is removed at very low cost and deleterious nces are not leached-out from the ash obtd. by the ation, etc.

/ D15 74814 A/42 = J8 0049-522

substd. cyclic alkylene tetramine(s) - useful as heavy metal tants, metal chelating agents and for recovery of heavy , e.g. uranium, from waste water

BUSHI I 17.05.77-JP-056000

*J01 K05 (12.12.80) *GB1529-150 B01d-11/04 C22b-60/02*

7 as 056000 (6pp955)

substd. cyclic alkylene tetramines are claimed, resulting from bstitution of 1 or more hydrogen atoms of cpds. of formula R1NHR3NHR4NH (where R1, R2 R3 and R4 are -CH2CH2- or -H2CH2-), by 8 or more. The substitution may take place on N or ds. (I) are soluble in organic solvents e.g. benzene, CH_2Cl_2, ethyl acetate etc. A typical cpd. is 1,5-dihexadecyl-1,5,8,12-zacyclotetradecane. (J53141175)

D15 76077 Y/43 #J8 0049-524

osite semipermeable membrane for reverse osmosis - prepd. cross-linked and grafted polyethyleneimines

P INC 09.04.76-DE-615495 (19.04.76-JP-044355)

*J01 (A26) (12.12.80) *DE2615-495 B01d-13*

6 as 044355 (6pp15)

rane consists of a finely porous substance and a very thin permeable polyamide film. The polyamide is cross-linked with omer, eg. acyl halide, chloro-formate, isocyanate or sulphonyl de and a cross-linked polyethyleneimine layer is produced on it raft-polymerised with epoxide, aldehyde, acid anhydride or a ve ethylene cpd., e.g. acrylonitrile.

nposite is used for reverse osmosis or ultrafiltration. 7481).

D15 55863 A/31 = J8 0049-526

ourising waste water contg. residual dye - by adding a polymer gulate the dye

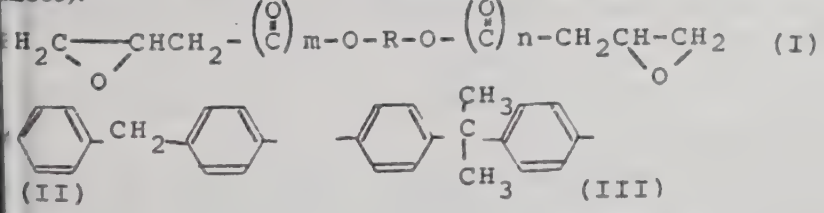
NEBO KK 08.12.76-JP-148011

*(12.12.80) *J53072-369 + B01d-21/* C02f-01/56*

6 as 148011 (8pp117).

waste water contains residual dyestuff in either dissolved or lar state. A high molecular polymeric cpd. or its salt obtd. he reaction of a mixt. of a cyanamide deriv., a lower aliphatic yde, and at least 1 diglycidyl cd. of formula (I) where R is lower ne, polyalkylene glycol residual gp., phenylene (II) or (III) and n are 0 or 1, is added to the coloured waste water at pH2-5 and 0 deg.C for coagulation of dyestuff with levelling agent.

method is applicable to dye industry waste water mainly chelate dye, acid dye, disperse dye, direct dye, reactive dye, nd the coagulant used is effective for even dyeing waste water levelling agent, does not damage microbial activity, does not ge the fastness of colour of dyed substance upon contacting, ncreases its coagulating capacity with the rise of temp. 2369).



I/ ★ D15 03163 D/03 ★J8 0049-527

matic discharge appts. for treated waste water - using sludge detector mounted on float to control discharge valve

IZUKI Y 24.06.75-JP-077787

.12.80) B01d-21/24

75 as 077787 (3pp26)

ice for discharging a water treated in a waste water treating ment is claimed. A sludge level detector is mounted on a float ng on the water surface in a treating tank to automatically ol a valve for discharging the water. (J52002058).

SHIF ★ D15 03164 D/03 ★J8 0049-528

Vacuum liq. filtering device - has filtering pipes in filter tank supported by cantilevers and tank for stirring liq.

SHINMEIWA IND KK 30.06.76-JP-078061

(12.12.80) B01d-33/08

30.06.76 as 078061 (4pp26)

Device for continuously filtering a liq. e.g. dirty water, into liq. and solid components comprises filtering pipes disposed annularly in a filter tank so as to be supported by cantilevers and a tank for stirring the liq. with agglomerant is rotatably disposed inside a circle, along which the filtering pipes are disposed. (J53002761)

AGEN D15 90242 A/50 = J8 0049-540

Heavy metal collecting agent for treating waste water - is prepd. by dividing coal dust, mixing with caking agent, shaping into pellets and dry distilling

AGENCY OF IND SCI TECH 14.04.77-JP-042861

*(12.12.80) *J53127-389 + B01j-20/20 C02f-01/28*

14.04.77 as 042861 (2pp51)

The agent is produced by (a) dividing coal dust into particles of suitable size, (b) mixing the divided particles with a caking agent, (c) shaping the resulting mixt. into pellets, and (d) dry-distilling the pellets at 500-700 deg. C for 0.5-2 hours.

In an example coal dust contg. 2.69% water, 61.30% ash, 24.45% volatiles, and 11.56% carbon was divided into particles of 0.1-1 mm. The particles were dry-distilled in a rotary kiln at 600 deg.C for 1 hour to obtain a heavy metal collecting agent. 0.4% of the agent was added to a copper sulphate soln. contg. 10ppm Cu. The resulting soln. was filtered. The Cu concn. of the filtered soln. was thus reduced to 0.9ppm. (J53127389).

NORQ D15 50578 A/28 = J8 0049-542

Cellulosic mercury ion absorbent prepn. - by forming cellulose xanthate and adding to thiosemicarbazone graft copolymer of aldehyde with acrolein

NORIINSHO KK 18.11.76-JP-138665

*A97 E32 J01 (12.12.80) *J53062-790 C08b-15 + B01j-20/22 B01j-45*

18.11.76 as 138665 (3pp42)

Process comprises adding ion exchange radical (I) to xanthrated cellulosic powder, by graft copolymerisation of aldehyde with acrolein to form thio-semicarbazone. Polymerisation is effected under ambient conditions.

Specifically peroxide (II) polymerisation initiator is impregnated in the xanthrated cellulose material (e.g. cotton, before copolymerisation. (J53062790).

SHMA D15 65845 Y/37 = J8 0049-552

Electrolytic waste water treatment - using cell contg. catalytic material, such as zeolite or active carbon, in one or both electrode chambers

SHIMIZU CONST 30.12.75-JP-159250

*J03 (12.12.80) *J52092-880 + C02f-01/46*

30.12.75 as 159250 (6pp58)

An electrochemical treatment process for drainage comprises putting catalytic materials of zeolite, active carbon, etc. onto the cathode and/or anode side of an electrolytic cell divided with a diaphragm, and electrolysing inorganic drainage or organic drainage on the catalytic materials.

Pref. ammonium ions are conc. in the organic drainage at the cathode side of the cell and chlorine ions are conc. at the anode side of the cell by passage of the current.

Process treats draina9e contg. inorganic reductive substances which cannot be treated efficiently by electrochemical means alone and organic drainage, the organic drainage contg. ammonium ion whose removal by means of adsorbing treatment alone is limited. Pure water with low BOD,COD and ammonium ion concn is obtd. (J52092880).

HOKU- D15 45036 A/25 = J8 0049-553

Simple water purification system - comprising column or vessel contg. sterilised shell fish shells through which water passes

HOKUEI KENSETSU KK 22.10.76-JP-126945

*(12.12.80) *J53053-149 + C02f-01/66*

22.10.76 as 126945 (5pp34)

Water for water supply systems is economically purified without white turbidity and without any complicated installations and maintenance, by passing it through a tower or vessel packed with the shells of shell fishes, e.g. oysters, scallop etc., previously sterilised.

The water is treated stably and easily under continuous operation without the pH rising to greater then 8.4. (J53053149).

KURK D15 64145 A/36 = J8 0049-554

Treating polluted water from e.g. food industry - by an aerobic microbial treatment process and coagulation using a cationic high polymer

KURITA WATER IND KK 10.12.76-JP-147645

*(12.12.80) *J53087-554 + C02f-03/12*

10.12.76 as 147645 (5pp117)

Polluted waters are treated by a microbial treatment process in which polluted water is mixed with suspended microorganisms for 4-10 hrs. under aerobic conditions in an aeration tank without backed sludge, and a coagulating treatment process in which the effluent from the microbial treatment process is supplied to a coagulating treatment equipment having a polluted water-supplying means at or near the bottom of the tank, with stirring blades mounted above the supplying means to produce a rotarty flow in the tank. A sludge blanket is placed in line with the layer surface and above the sludge blanket a treated water-discharging means is given. (J53087554)

HITF D15 33512 Y/19 = J8 0049-555
Treatment of waste water contg. heavy metals - by biological oxidation followed by alkaline pptn. of heavy metals
HITACHI SHIPBLD ENGG KK 25.09.75-JP-116011
*(12.12.80) *J52039-964 + C02f-01/62 C02f-09*
25.09.75 as 116011 (3pp34)
Heavy metals and organic matters (organic acids esp. e.g. aminocarboxylic acids inhibiting formation of heavy metal hydroxide) contg. waste water is subjected to the following treatment. First there is biological oxidn. by aeration to decompose the organic mattters and simultaneously to convert the heavy metals into a difficultly soluble corresponding carbonate. Subsequently pH is made alkaline to form a heavy metal hydroxide. This is followed by sepn. of a ppte. comprising heavy metal carbonate and hydroxide.

Thus it becomes possible to remove at a low cost heavy metals from waste water, even in the presence of organic materials, esp. aminocarboxylic acids. etc. (J52039964).

HITA D15 49091 Y/28 = J8 0049-556
Tertiary water treatment for anaerobic effluents - reduces their BOD and produces a fertiliser by-product
HITACHI KK 25.12.75-JP-156248
*C04 (12.12.80) *DE2658-909 C02f-09*
25.12.75 as 156248 (6pp-)
The process comprises (a) adding slaked lime to the anaerobically - treated organic effluent to render it alkaline, (b) sepg. ammonia from the effluent, (c) adsorbing the ammonia in an ion exchanger, (d) absorbing the ammonia by reacting it with an acid and converting it to an ammonium salt (e) passing carbon dioxide into the treated water, before the ammonia is sepd. in (b) above, to remove P as a solid and (f) subjecting the treated water to an aerobic degradatory treatment before the solid is removed in stage (e).

The process is used to reduce the BOD of effluents from anaerobic treatment of waste having a high BOD, e.g. activated sludges, excreta and alcohol distillery effluent. The process is economic and produces a N- and P-contg. fertiliser as a by-product. (J52079556).

MITU D15 34525 A/19 = J8 0049-557
Sulphate-contg. waste water treatment - includes a secondary coagulation treatment at high alkaline pH to remove calcium ions
MITSUBISHI CHEM IND KK 14.09.76-JP-110347
*F06 M11 (12.12.80) *J53035-255 + C02f-03/12 C02f-09*
14.09.76 as 110347 (3pp34)
In purificn. of sulphate ion-contg. waste water, e.g. discharged from a dyeing plant and a plating plant etc. by adding a Ca salt, e.g. CaO, Ca(OH)2 lime stone and dolomite etc. to carry-out an initial coagulation precipitation treatment introducing the waste water into a closed apparatus where it is treated biologically. Then adding a coagulant to carry out a secondary coagulation precipitation treatment and then filtering. The improvement comprises carrying-out the secondary coagulation precipitation treatment at pH more than 8, so that Ca(2+) ion in the waste water is precipitated in as CaCO3 and removed from the system. This effectively suppresses clogging during filtration. (J53035255).

OSAO- D15 82161 X/44 = J8 0049-559
Photographic waste liquor treating system - by aerating, separating sludge from liquid and subjecting liquid to anion exchange process
OSAKA OXYGEN IND 13.02.75-JP-018291
*G06 J01 (12.12.80) *J51105-161 + C02f-03/12 C02f-09*
13.02.75 as 018291 (5pp)
An economical system of treating a photographic waste liquor esp. a colour photographic waste liquor etc. comprises subjecting the liquor to a treatment by the following steps, (a)maintaining the photographic waste liquor contg. matters capable of being oxidised biochemically at B.O.D value less than 3,000 p.p.m. and pH 6-9, (b) admitting the waste liquor into an aerating vessel so as to be aerated with conc. O2 gas under MLSS of more than 3,000, p.p.m B.O.D load of more than 0.3 kg B.O.D./kg MLSS/day and residence time of 2.5-9 hrs. then introducing continuously the waste water treated into a settling vessel where it is sepd. into a supernatant liquor and a sluge, (c) maintaining an overflow liquor from the settling vessel at pH values of greater than 4.5 to oxidise a portion of harmful components so as to be faded in colour and (d) introducing the liquor obtd. in (c) into a bed contg. a porous-type anion-exchanger having a cross-linking deggree of less than 20 and a specific surface area of more than 0.19 square metre/g to remove by adsorption therefrom inorganic and/or organic components. (J51105161).

DAII- D15 22876 A/12 = J8 0
Closed system purification of polluted water - by ion-exc treatment and recycle of dilute sepd. liquor after sepn. by r osmosis
DAIICHI DENSHI KOGY 27.07.76-JP-089543
*(12.12.80) *J53014-956 + C02f-01/42 C02f-06*
27.07.76 as 089543 (5pp34)
Polluted water,esp. contg. an electrolyte, is purified by introc the water into ion-exchange resin appts. to clarify it when its c is low; sepg. the eluate into a conc. sepd. liquor and a dilute liquor by introducing it into a reverse osmosis appts. introducing the dilute sepd. liquor into the ion-exchange resin to clarify it so as to form a closed cycle.

In a modification, the polluted water is initially introduced in reverse osmosis appts. to separate it into the conc. sepd. liquo the dilute sepd. liquor when its concn. is higher; transferrin dilute sepd. liquor to the ion-exchange resin appts. to clarify it sepd. the eluate into conc. and dilute sepd. liquors by means c reverse osmosis appts. (J53014956).

MAZN D15 44489 Y/25 = J8 004
Anion exchange resin prodn. - by introducing tert.-aminomethyl into phenyl rings of crosslinked network polymer using Mar reaction
MARUZEN OIL KK 07.11.75-JP-134465
*A91 J01 (J04) (12.12.80) *J52058-087 C08f-08/32 + B01j-41/14*
07.11.75 as 134465 (5pp43)
Prodn. of anion exchange resin contg. monomer units of aminomethylated hydroxystyrene in the polymer skel comprises introducing tert-aminomethyl gps. through Man reaction into phenyl rings of cross-linked network polymer sele from acyloxy hydroxystyrene and polyene cpd.

Prodn. of anion exchange resin contg. c ammoniummethylated hydroxystyrene monomer units compr introducing tert-aminomethyl gps. into phenyl rings of the al crosslinked network polymer through Mannich reaction and converting into quat. ammonium gps..

The anion exchange resins with their phenolic hydroxyl gps. higher amino gp. or ammonium gp. density, are useful as chela agents ion exchangers, catalysts and gas adsorbents. (J52058087)

EBAR ★ D15 03170 D/03 ★J8 004
Waste water contg. otopic ruthenium treatment - with iron, alloys or activated iron cpds.
EBARA MFG KK 30.04.74-JP-048509
J01 K07 (13.12.80) B01d-15 B01j-20/06 G21f-09/12
30.04.74 as 048509 (6pp38)
Isotopic Ru contained in waste water is removed by treating it Fe, Fe alloys, or activated Fe cpds.

In an example Fe wool was activated by treating it with ste Waste water contg. 6.3 x 10power minus 3 pCl Ru106 ml was tre with the activated Fe wool by a batch method. The treated w contained 4.0 x 10 power minus 6 micro-Ci/ml. (J50140799).

SASA- ★ D15 03179 D/03 ★J8 004
Constant brine level maintenance in multistage flash evaporator
SASAKURA KIKAI SEIS 09.08.71-JP-060168
J01 (15.12.80) B01d-03/06 C02f-01/06
09.08.71 as 060168 (6pp26)
Method is for maintaining the liq. level in a multi-stage f evaporator. Level of brine in a high-temp. zone, pref. a first sta evaporator chamber adjusts the flow rate of a brine(circulatin as to make the level constant in each stage of evaporator (J48025685).

TABU/ D15 12711 B/07 = J8 004
Sepn. of ferric ion from aq. phase by contact with hydrophobic l contg. quat. ammonium salt followed by contact of hydrophobic with second aq. phase
TABUSHI 04.06.77-JP-065276
*E31 (E16) (15.12.80) *J54001-273 B01d-11/04 C01g-49/02 + C 01/26*
04.06.77 as 065276 (5pp51)
Method comprises contacting an aq. phase (I) contg. ferric coordinated with chlorine ion with hydrophobic liq. (II) co methyl trialkyl ammonium halide, and contacting (II) with aq. ph (III) without contacting (III) with (I). The methyl trialkyl ammon halide is pref. methyl-trioctylammonium chlor methyltrionylammonium chloride, or methyltridecylammon chloride. The hydrophobic liquid is pref. chloromethylene chloroform. (III) pref. contains a ferric ion sepg. agent.

In an example an aq. phase contg. 0.05 mol/l. of ferric chlorid chloroform hydrophobic liq. contg. 1.0 mol./l. of methyltrioctylammonium chloride, and an aq. phase contg. HCl pH of 2 were placed, in order, in a glass U-tube. The hydrophobic was stirred with a magnetic stirrer at 150 r.p.m., and ferric ion extracted from the first aq. phase to the hydrophobic liq. and t

d from the hydrophobic liq.to the second phase.(J54001273).

D15 12896 B/07 = J8 0049-883
ne for use in ultrafiltration and reverse osmosis - comprises upport, layer of alumina sol or alkali metal aluminate and vater soluble polymer
UBISHI CHEM IND KK 08.06.77-JP-067476
*01 (15.12.80) *J54002-276 B01d-13*
s 067476 (5pp42)
nic membrane consists of (1) porous support, (2) layer of sol. aluminate alkali metal is and (3)layer of water-soluble . The membrane is prepd.by flowing aq. soln., alumina sol. inate and aq. soln. of polymer on the surface of the support pressure.
ically the support is made of ceramics, sintered metal sintered glass powder, carbon and organic resins, e.g. etc., and has pores of mean dia. of 0.01-1, e.g. (0.025-0.8). Na te is pref. used as aluminite. The water soluble polymer is lic acid, PVP etc. (J54002276).

D15 48118 B/26 = J8 0049-885
of complex membrane for reverse osmosis and ration - by coating polymer bonding agent on sheet, forming pirally winding on tubular membrane and compressing
O ELECTRIC IND KK 28.10.77-JP-130145
*J01 (15.12.80) *J54062-982 B01d-13*
as 130145 (6pp51)
mbrane is obtd.by (a) coating a polymer type bonding agent et body, (b) forming pores through the sheet body thus coated in a porous sheet, (c) winding the sheet on a tubular ble membrane in spiral, (d) inserting a tube type supporter tube type membrane thus wound, and (e) compressing the sheet and membrane with (hot) water onto the supporter to complex type permeable membrane.
fically a porous sheet of polyethylene coated with a vinyl system bonding agent is wound on a tube type rmeable membrane of cellulose acetate to obtain a tube type x membrane. The complex membrane is inserted in a tube pporter. The complex membrane is pressed with water onto er side of the supporting tube to be completely bonded n the sheet and the semipermeable membrane. (J54062982).

D15 48119 B/26 = J8 0049-886
r semipermeable membrane prodn. - includes coating sheet olymeric bonding agent, forming pores in the sheet and g sheet on semipermeable tube
TO ELECTRIC IND KK 28.10.77-JP-130146
*J01 (15.12.80) *J54062-983 B01d-13*
as 130146 (6pp51)
embrane is obtd. by (a) coating a polymeric bonding agent sheet, (b) forming pores through the coated sheet, (c) winding rous sheet on a semipermeable tube to obtain a tubular sition membrane; (d) inset
(b) the composite membrane into a porous supporting tube, pressing the membrane with pressurised water or hot water e supporting tube.
cally, a porous polyethylene film coated with vinyl acetate bonding agent is wound on a semipermeable tube of acetyl se to obtain a composite membrane. The membrane is d into a porous supporting tube and pressed with compressed onto the supporting tube. A completely bonded permeable rane is thus obtd.
membrane is used in a reverse osmosis or ultrafiltration. 983).

D15 51825 B/28 = J8 0049-888
rane sepn. treatment of food and fermentation waste - using inary filtration with copper metal fibre or powder to prevent rganism growth contaminating membrane
TO ELECTRIC IND KK 15.11.77-JP-137491
*(15.12.80) *J54069-578 B01d-13 + C02f-01/44*
as 137491 (4pp117)
ment of waste waters from foods mfr. fermentation, medicine ent, etc. contg. protein, aminoacids, saccharides, etc. is d using a membrane separation method. Waste water is first through a filter medium of Cu metal having a great number e defects, e.g. Cu fibre, (un)woven fabric, Cu wire netting, Cu minate, electrolytic Cu foil laminate, electrolytic Cu powder, e filtrate is then subjected to a membrane sepn. using reverse s appts., ultrafiltration appts., micro-filtration appts., or a nation of these.
od is capable of preventing the growth of microorganisms e microorganisms present in liquors to be treated are killed sage through the copper filter medium, thus preventing the g of the filtering capability of semipmerable membrane due dhesion and attack of microorganisms. (J54069578).

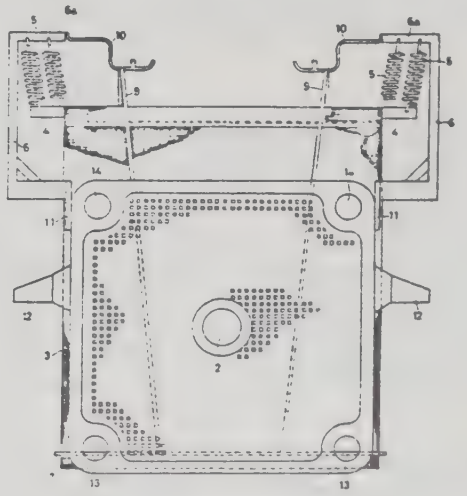
HITA D15 53668 B/29 = J8 0049-889
Sterilising reverse osmosis appts. - using an aq. soln. of salicylic acid under pressure
HITACHI KK 24.11.77-JP-140039
*E14 J01 (15.12.80) *J54072-779 B01d-13*
24.11.77 as 140039 (4pp51)
The method comprises adjusting an aq.soln. of salicyclic acid to pH less than 5; and passing the soln. through reverse osmosis appts. under pressure to sterilise it.
The reverse osmosis appts. is used to treat liquor with high BOD. (J54072779).

KINS- ★ D15 03180 D/03 ★J8 0049-890
Filter press for waste water - where a pressure difference is applied between two chambers for receiving filtrate passing through filter cloths
KINSEI KOGYO KK 20.05.77-JP-058992
(15.12.80) B01d-25/12
20.05.77 as 058992 (4pp26)
A filter press for filtering a waste water comprises means for providing a pressure difference between two chambers 6,7 for receiving filtrate passing tbrough filter cloths 4,5. The means 13a is inserted into a filter-cloth washing liquid passage connected to either chamber.(J53144075).

KURK ★ D15 03181 D/03 ★J8 0049-891
Filter press for treating waste water - comprises filter plates contg. parallel bored holes to form chambers, stirring blades being mounted on shaft passing through holes
KURITA KIKAI SEISAK 24.05.77-JP-060765
(15.12.80) B01d-25/12
24.05.77 as 060765 (3pp26)
Filter press comprises filter plates arranged in parallel to form filter chambers. Holes are bored through the plates to feed a raw liquid such as dirty water into the chambers. Stirring blades are mounted on a drive shaft passing through the holes to turn near the holes. (J53145160).

NTOK ★ D15 03182 D/03 ★J8 0049-892
Filter cake removal from spring suspended filter cloth - by vibrating cloth suspension bar
NORITAKE TEKKOSHO 06.06.77-JP-067096
(15.12.80) B01d-25/12
06.06.77 as 067096 (4pp26)
A device for removing filter cake from a filter press comprises a pair of springs connected to both ends of a horizontal bar to hang a filter cloth held between each adjacent filter plates. A vibrator is provided for vibrating the bar to remove the cake. (J54001466).

NTOK ★ D15 03183 D/03 ★J8 0049-893
Filter press cake remover - comprising horizontal bar fixed to middle of folded, suspended filter cloth
NORITAKE TEKKOSHO 06.06.77-JP-067097
(15.12.80) B01d-25/12
06.06.77 as 067097 (5pp26)
A device is claimed for removing filter cake from a filter press for treating a dirty water. A horizontal bar (7) is fixed to the middle of a filter cloth folded in two and hung up by upper hangers fixed to a frame through ropes so that when opening the filter press, the middle is wound up.(J54001467).



KURK ★ D15 03184 D/03 ★J8 0049-895
Filter press compression plate - with dovetail grooves formed in ridges and nozzles fitted into grooves
KURITA KIKAI SEISAK 09.06.77-JP-068679
J01 (15.12.80) B01d-25/12
09.06.77 as 068679 (3pp26)
A dovetail groove is formed at a marginal ridge on each side of a flexible compression plate. A pair of nozzles are fitted into the

grooves and supported by a frame so as to hold flush with the ridge when deforming the plate. (J54003967).

KURK ★ D15 03185 D/03 ★J8 0049-896
Structure for engaging filter plates of openable filter press - for treatment of waste water etc., with driven member pivoted to filter plates to effect turning
KURITA KIKAI SEISAK 24.09.70-JP-083971
(15.12.80) B01d-25/14
24.09.70 as 083971 (8pp26)
A structure for engaging and disengaging filter plates of a filter press for treating dirty waters is claimed to drop off cakes between them. Each plate has a hook engageable with a feeder for moving the plate from adjacent filter plates before and after dropping off cakes.

The novelty is that a driven member is pivoted to each filter plate, interposed between the plate and associated feeder for turning the plate. One end of the member is projected so as to be engageable with the hook, another end is located at a receiving face of the plate, at which the top end of the feeder strikes, and another end is engaged with one end of the plate to project so as to restrain the turning motion of the plate.

KURK ★ D15 03186 D/03 ★J8 0049-897
Washing filter cloth in press - using appts. with rail bars carrying slider supplied with cleaning liq.
KURITA KIKAI SEISAK 22.06.71-JP-045343
J01 (15.12.80) B01d-25/28 B01d-35/16
22.06.71 as 045343 (6pp26)
Appts. for washing a filter cloth held between filter plates of a filter press is new. Rail bars are movably coupled with support beams so as to be parallel to the filter plate face. A slider is coupled with the bars to wash the filter cloth with cleaning liq. fed from a pipe fixed to the slider. (J48011663).

KURK D15 17159 B/09 =J8 0049-900
Sludge treatment in protein recovery, juice sepn. etc. - using horizontal rotary filter elements
KURITA WATER IND KK 25.06.77-JP-074936
*(D14) (15.12.80) *J54010-271 + B01d-33/24*
25.06.77 as 074936 (6pp26)
Rotary filter elements are horizontally carried in a treating chamber. Each element has a rotary shaft having a filtrate liq. inlet and outlet ports at both ends. A filtrate liq. chamber is disposed near the treating chamber and communicates with the outlet ports of the elements through the wall of the treating chamber.

The device used for treating sludge and is applicable to water treatment, recovery of proteins from waste liqs. drained from food factories, and sepn. of juices from raw liqs. in juice prodn. plants. Filtrate liq. take-up ability is improved and changes of sludge dewatering rate are avoided. (J54010271).

KURK ★ D15 03187 D/03 ★J8 0049-901
Device for removing suspended solids - in waste water, has rotary filter elements with fins attached in a tank
KURITA WATER IND KK 01.07.77-JP-077813
(15.12.80) B01d-23/24
01.07.77 as 077813 (5pp26)
Device for removing suspended solids contained in a dirty or waste water comprises rotary filter elements arranged in a tank so that fins fixed on the side outer surface of each element are inserted into very small spaces of the fins of adjacent rotary elements with transverse filtrate outlets. (J54013657).

KURK ★ D15 03188 D/03 ★J8 0049-902
Waste water treating device - comprising rotary filter elements in a chamber to remove suspended solids
KURITA WATER IND KK 05.07.77-JP-079485
(15.12.80) B01d-23/24
05.07.77 as 079485 (6pp26)
A device for removing suspended solids contained in a dirty water is claimed. It comprises rotary filter elements disposed a treating chamber, so that fins fixed to the outer side surface of one element are inserted into very small spaces formed between the fins of another element. (J54015358).

MISK D15 16757 B/09 =J8 0049-907
Gas-solid contact device for treatment of waste water etc. - has overflow pipe for solid granular material, with truncated inverted cone shape
MITSUBISHI KAKOKI KAISHA 21.06.77-JP-072772
*J01 (15.12.80) *J54008-168 B01d-15/02 B01j-08/28*
21.06.77 as 072772 (3pp26)
The device comprises a multistage fluidised bed of the solid grain. The overflow pipe installed on each stage, for flowing the solid grain down agains the ascending flow of the liquid through the stages, has a shape of truncated inverted cone.

The cone angle of the overflow pipe, is about 4 degrees to the vertical line. Each pipe is supported by a horizontal suppo Movement of the grains down each pipe is continuous an (J54008168).

JAOR D15 42827 B/23 =J8
Mixing waste acidic and alkaline solns. - with outlet for alkal in centre of passage for acidic soln.
JAPAN ORGANO KK 13.07.77-JP-082887
*E33 (15.12.80) *J54039-371 + B01f-03/08 B01j-14 C02f-01/6*
13.07.77 as 082887 (6pp)
In a process for mixing waste acidic soln. (I) contg. alkali metal ions, i.e. Ca or Mg ions, with waste alkaline soln. (II (bi)carbonate or silicate ions to effect neutralisatio improvement comprises opening a jet type outlet for (II centre of a passage for (I) in the direction of flow soln., surrounding the flow of (II) with the flow of (I).

The total flow is passed through a narrow passage to effec mixing, thereby adjusting the pH of the resulting mixed soln The adjusted soln. is stripped with air in a stripping tower to free carbon dioxide.

Both waste soln.s (I) and (II) are thus neutralised without pptn. of carbonate and silicate. (J54039371).

KYOY D15 46595 A/26 =J8 0
Copper-contg. ammonium persulphate waste etching treatment - by heating to decompose persulphate and fa electrolytic copper recovery
KYORITSU KOGYO KK 29.10.76-JP-130137
*E35 L03 M14 (M28) (16.12.80) *J53055-474 + C23f-01 C25c-01*
29.10.76 as 130137 (3pp43)
Heating is at 50-90 deg.C with pH of the soln. adjusted to less t with or without applied pressure. The process decom ammonium persulphate completely in a short time with tox evolution. Method is applicable to treating etching solns. for p circuit plates.

In an example, 300 pts. wt. waste soln. contg. 9.13% amm persulphate and 0.50% dissolved copper and having a pH less t were charged into a corrosion-resistant tank, and heated to 70 under stirring for 2 hrs. 87.5% ammonium persulphate decomposed. The thus treated soln., when electrolysed at 2A/s gave 99.99% Cu yield. (J53055474).

MAZN ★ D15 03213 D/03 ★J8 00
Oil water separator for e.g. industrial waste waters - com vertical central tube for raising the liq. and two coaxial charged with active carbon
MARUZEN ENG KK 01.08.77-JP-092857
(18.12.80) B01d-15 B01d-17/02 B01d-29/08
01.08.77 as 092857 (3pp26)
A device for sepg. the oil content from a liq. such as industrial waters, contg. very fine oildrops formed around very small grains comprises a vertical central tube for raising the liq. an coaxial tubular chambers, communicating with each other each charge with active carbon. (J54026568).

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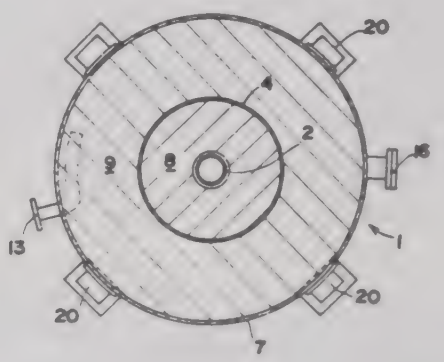


KURK ★ D15 03214 D/03 ★J8 005
Sludge treatment device - comprising rotary filter elem arranged in tank, each with axial slits
KURITA WATER IND KK 19.07.77-JP-085584
P71 (18.12.80) B01d-33/24 B30b-09/20
19.07.77 as 085584 (6pp26)
Device for removing water from effluent contg. suspended s comprises rotary filter elements arranged in a treating tank. element has very small axial slits for dewatering the waste w during rotation. (J54021675).

★ D15 03215 D/03 ★J8 0050-447
treating device - comprising rotary filter elements in tank, ge detector and hardness controller
RITA WATER IND KK 02.08.77-JP-092159
(18.12.80) B01d-33/24 B30b-09/20
as 092159 (6pp26)
is for concentrating and dewatering suspended solids ed in a liq. such as dirty waste waters. It comprises (i) rotary ements arranged in a treating tank, (ii) detector for detecting red sludge discharged from the outlet of the tank; and (iii) ler for controlling the hardness. (J54027253).

★ D15 03216 D/03 ★J8 0050-448
n. device for dirty water - comprising rotary filter elements ed in tank
RITA WATER IND KK 04.08.77-JP-092947
(18.12.80) B01d-33/24 B30b-09/20
as 092947 (7pp26)
ce for treating dirty or waste waters by concentrating and ring suspended solids in the water is claimed. It comprises filter elements arranged in a tank and means for avoiding ion of dead spaces between the elements and tank, such as gs fixed to it. (J54028068).

★ D15 03217 D/03 ★J8 0050-449
cake removal from rotary filter drum - by a scraper
KKEI SANGYO KK(NIKZ) 00.00.77-JP-042062
12.80) B01d-37/02
as 042062 (2pp26)
nod for replacing a coating layer in a filter for filtering a liquid s dirty water comprises a rotary drum covered with a filter oated with the same substance as the filter cake to form the glayer. A detector is provided to detect the liquid level in a tank, in which the drum is immersed, to pepeel off the coating, evel exceeds a threshold. (J52121866).

D15 07297 V/05 = J8 0050-469
nt purification - by evaporation in an air cooled column and g of solids
MMUS CO 07.09.72-US-286939
*12.80) *BE-804-577 C07c-63/26 + C02f-01*
0 as 098173 (6pp)
esidue stream from a treating plant is purified by (a) rating in a cooling column to remove some water and ppte. chemical impurities (b) separating the ppt. (c) passing the aq. to an indirect heat exchanger with an effluent stream (d) ing the stream (e) recovering ppted. chemicals which can be s fuel. The cooling water is partly replaced by aq. effluent reduces fresh water costs. (J49099959).

D15 90751 Y/51 = J8 0050-470
ment of metal ion-contg. water - involves passage through gen-type strong acidic cation exchange resin and then alkali type strong acidic cation exchange resin
PPON WATER TREATM KK 30.04.76-JP-049670
*12.80) *J52132-545 + B01j-47 C02f-01/42*
6 as 049670 (3pp34)
val of metal ions with the exception of alkali metal ions, e.g. g, Ag, Hg, Zn, Al, Sn, Pb, V, Sb, Bi, Cr, Mn, Mo, Cu, Fe, Co, Ni u etc. from water comprises passing it through a column d with a strongly acidic cation exchange resin on which is ped a pH-indicator to detect remaining ion-exchange capacity acidic cation exchange resin by variation in pH value of the g liq.
rovement comprises previously passing the water through a of a hydrogen-type strongly acidic cation exchange resin to the metal ions and simultaneously to isolate (hydrogen ion), fter passing the water through a layer of an alkali metal-type ly acidic cation exchange resin carrying a pH-indicator, e.g. l Yellow etc., so that the resin is converted into a hydrogen- in the inter-exchange between the alkali metal ion, and gen ion) thus isolating the alkali metal ion by reaction of R- a gps. with (hydrogen ion) to give RSO3H.
pH-indicator adsorbed on the alkali metal-type resin varies y in its colour due to the large pH variation and this colour ion is transferred in the direction of the water flow in dance with the ion-exchange process. (J51049670).

D15 18078 A/10 = J8 0050-473
nt purification - by controlling microbial concentration and n the aeration tank
TSUI TOATSU CHEM INC 05.10.76-JP-118961
*12.80) *DE2737-609 + C02f-03/12*
6 as 118961 (5pp922)
rocess consists of keeping the microbial concentration in at 1 aeration tanks of 20-200 wt.% of the total organics in the nt and the ratio of the total organic C treated per day at 3-25 on the microbial wt. in the tank(s)).

The method is an improvement over the conventional activated sludge process. In the latter, the sludge has to be removed from the aeration tank before recycling. During this stage a period of anaerobic conditions occurs when the microbes lose some of their activity. The reduced dwell time of the effluent in the aeration tank is also shorter (1.5-6 hrs.) and the microbial concentration lower (pref. 50-400 ppm). At the rate of flow, the more active microbes proliferate and have an extremely high N and P content (e.g. 10-14% and 4-6% in the resulting sludge, compared to 5-8% and 0.5-1.5% resp. in the activated sludge method).
The ratio of the total organics per unit microbial wt. per day is also markedly lower than in the activated sludge method. Using typical municipal effluent, 70-90% of the N, 50-70% of the P and 90-96% of the BOD is removable. (J53045048).

MITU D15 22451 Y/13 = J8 0050-478
Treating waste water from livestock yard - to reduce BOD and ammoniacal nitrogen content without increasing COD
MITSUBISHI CHEM IND KK 05.08.75-JP-095299
*(18.12.80) *J52019-464 + C02f-03/34*
05.08.75 as 095299 (7pp83)
The process is carried out in a single system comprising an activated sludge aeration basin and a trickling filter connected by circulation pipe. The process comprises (a) aerating waste water for 6-18 hours while circulating the water between the aeration basin and trickling filter; (b) allowing the water to stand for 4-16 hours, (c) repeating the step (a) for 10-120 min; and (d) allowing the water to stand for 30-60 min.
Since the treatment is operated batchwise in a closed system, each step can be operated until the treatment is fully accomplished; the process can be controlled so as to treat a constant quantity of waste water every day; automation is possible by use of a timer. (J52019464).

KUBI D15 34529 A/19 = J8 0050-480
Treating water polluted with ammonia-contg. excreta - by aerating in an aerophilic digestion vessel and transferring to activated sludge aeration vessel
KUBOTA KK 13.09.76-JP-112313
*(18.12.80) *J53035-262 + C02f-03/34*
13.09.76 as 112313 (4pp34)
The water is aerated for a few days at a pH of 6.5 to 7.5 at above 15 deg.C and transferred to an activated sludge aeration vessel and in succession to a settling vessel.
The improvement comprises introducing a sludge nitrification bacteria-activating vessel and a denitrification bacteria-activating vessel to make activated the nitrification bacteria and denitrification bacteria.
The activated nitrification bacteria-containing sludge is recycled to the aerophilic digesting vessel where BOD components are decomposed by nitrification bacteria and NH3 is oxidised by the nitrification bacteria to NO3(-) and NO2(-). This is then introduced into the activated denitrification bacteria-containing sludge from the vessel if necessary together with a carbon source, e.g. MeOH etc. to reduce the NO3(-) and NO2(-) to N2 gas, so that the nitrification and denitrification treatments are increased in its efficiency without any new special installations. (J53035262).

WITC D15 32497 W/20 = NL-165-658
Silicon contg. anti-foaming agent - silica rendered hydrophobic by reaction with chloro-organo-silanes
WITCO CHEM CORP 16.01.74-US-433622
*A60 E11 G03 (15.12.80) *BE-823-541 B01d-19/04 C09c-03/12 + B01b-01/04 C09c-01/30*
10.12.74 as 016054 (5pp510)
A foam-breaker is prepd. by reacting a 1-15 .% suspension of hydrophilic, pptd. silica, in an inert, water-iscible solvent, with (I) 10-50 wt.% of an organotrichlorosilane, and then with (II) 10-50 wt.% of a diorganodichlorosilane; the molar ratio of (I):(II) is 1:1-5 (1:3). The new foam-breaker has high activity. The claimed reactants are (I) octadecyl-or methylstearyl- trichlorosilane, and (II) dimethyl- or methylvinyldichlorosilane (III). The effectiveness of a foam-breaker derived from an ethylenically unsatd. organochlorosilane, e.g. III, is increased if the prod. is sulphated by reaction with H2SO4 (claimed), or is halogenated. The foam-breaker is pref. used with 0.5-15 (2-5) % of an emulsifier, partic. polyethylene glycol 400 tall oil diester. The foam-breaker can be diluted with the solvent, or be emulsified in water.

EBAI D15 94248 R/51 = NL-165-660
Separating solids from suspension
EBARA INFILCO KK 08.09.69-JP-U85182 (18.06.69-JP-048032)
*J01 (15.12.80) *DE2029-953 B01d-21/* + B01d-17*
17.06.70 as 008862 (10pp1014).
The horizontally aligned drum in a plant for dewatering a suspension to which a flocculating agent has been added, is rotated, and has at one side an inlet for the suspension and at the other, an outlet for the solid matter. It is divided by a partition into a treatment zone for the suspension in which a transporting mechanism, formed by spirally

aligned plates, is fitted and a dewatering zone.

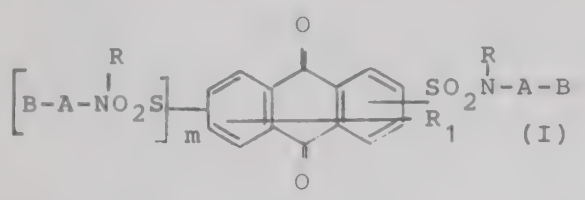
Close to the circumference the partition has an outlet for water and solid matter. The wall of the drum in the dewatering zone has an outlet, which, seen in the direction of rotation, is in front of the outlet through the partition. Behind the outlet in the drum wall a guide plate for solid matter is provided, and the unit though simple in design reduces the suspension to granules or lumps efficiently.

VYRM- D15 57365 R/32 =NL-165-715
Removing iron from deep earth well water
VYRMETODER AB (REI) 13.02.69-FI-000453
*(15.12.80) *BE-745-664 + C02f-01/64*
13.02.70 as 002108 (4pp1014)
Equipment for removing iron from underground water, close to a well, esp. a deep well, includes a means of delivering feed water contg. oxygen into the layer contg. water close to the bottom of the well.

A number of injection tubes placed in the ground some distance from the well and extending intoe water-holding bottom layer, have their upper ends connected to a water feed line.

The technique uses natural methods, as when rain water contg. large amts. of oxygen penetrates into the lower strata. A purifying plant for removing the iron is not necessary, and the iron oxide remains in the ground.

CIBA ★ D15 03233 D/03 ★RD-200-005
Oxygen scavenging to prevent corrosion in aq. system - by using an anthraquinone sulphonamide catalyst to promote reaction between hydrogen sulphide and oxygen in water
CIBA GEIGY AG 20.11.80-RD-200005
*E14 M14 (10.12.80) C23f-00/**
20.11.80 as ------ (-pp982)
The scavenging of oxygen to prevent corrosion in aq. systems contg. H2S may be achieved using, as promoter of the reaction of H2S and O2 present in the water, a catalyst consisting of an anthraquinone sulphonamide of formula (I) (where A is 1-4C opt. branched alkylene, B is a -SO3M, -CO2M, -PO3HM or -PO3M2 gp, M is H or a cation providing a water-soluble deriv., R is H a cation providing a water-soluble deriv. or a 1-4C opt. branched alkyl, R1 is H, methyl or -COOH and m is 0 or 1).



(I)

SVVA-★ D15 D/03 ★SE 7903-323
Condensers in fresh water evaporator - pass vapour to troughs beneath them with chambers having water guide screens inside producing screw type path
SVENSKA VARV UTVECK 17.04.79-SE-003323
(15.12.80) C02b-01/04
17.04.79 003323 (-pp1161)
The evaporator is for the prepn. of fresh water, and involves an even number of chambers located on opposite sides of a lengthways wall which divides the evaporator housing into two halves. In the upper part of each half is a condenser pointing in the direction of the wall, each condenser being common to those chambers on its side of the wall.

The fresh water vapour gathered on the exteriors of the condenser is collected in a trough placed below them. From the base of the housing extend inflow and outflow conduits into the chambers, and in each chamber is a screen which guides the water screw-fashion within it.

STAM D15 57251 V/32 =SU-733-514
Aerating effluent and keeping sludge in suspension - by oblique water jets striking surface at specific angle and speed
STAMICARBON BV 29.01.73-NL-001201
*(08.05.80) *DE2404-198 C02c-01/10*
28.01.74 as 995248 (3pp)
Effluent is aerated and activated sluge is maintained in suspension by jets of water obliquely striking the surface. The vessel used is circular, eliptical or polygonal in plan and of constant cross-section through the greater part of its height, the jets striking the surface at not more than 60 deg.pref. 10-20 deg to the surface with a speed of 3-12(4-8) m/sec. the horizontal component of the tangent being in the general direction of flow.Bul.17/5.5.80.

ITIL- D15 40841 B/22 =US 4241-685
Self-stabilising floating tower - with sea access to upper and floats and shock absorber in lower part of cylindrical tower
ITI LTD (ITII) 22.11.77-FR-034980
*H01 Q24 (30.12.80) *DE2845-191 B63b-35/44 + B63g-35*
06.11.78 as 957886 (07pp1358)
An offshore floating tower includes a vertical outer cylinder c by a horizontal slab into two open-ended half-cylinders, the comprising a ring of buoyancy tanks enclosing a bell- chamber partly filled with air for pneumatic damping of movement and ballasted as required.

The upper half-cylinder is open to the sea with its entire s having a regular pattern of perforations.An internal v cylindrical enclosure is formed by an annular damper cham the upper half and in the lower a bulkhead separating th chamber from the ring. The tower is pref.made of concrete usi sliding shuttering method.

BATT D15 64857 B/36 =US 42
Composite membrane prodn. for hyperfiltration - from s polymer carrier film with sepg. film coating and porous supp membrane, giving high capacity
BATTELLE-INST EV 25.02.78-DE-808222
*A88 J01 + P73 (A11 A14) (30.12.80) *DE2808-222 + B01d B32b-31/12*
26.02.79 as 014952 (4pp977)
Prodn. of composite membrane consisting of a porous suppo membrane and a thin sepg. membrane comprises (1) produc sepg. membrane on the surface of a carrier film consisting least one soluble polymer, (2) placing the carrier film having membrane with its sepg. membrane side on a porous suppo membrane such that the sepg. membrane is between the suppo membrane and the carrier film, and then (3) dissolving the ca film.

The membrane is used for hyper filtration, e.g. reverse osm desalination and sewage and effluent treatment.

INNO- D15 36999 C/21 =US 424
Layered membrane assembly for electrochemical proce comprising sheets of capillary material separated by impermeable layers
INNOVA INC 06.11.78-US-957876
*A88 E36 J01 (X25) (30.12.80) *EP--10-984 C25b-13/02*
06.11.78 as 957876 (12pp926)
Membrane for electrochemical purposes comprises layers ma void-free capillary material in which each layer is thin enou retard the passage of water, but thick enough to allow radicals ions to pass through. The material has a positive wetting angle a formed into directed capillary channels to allow the passa anions and cations. Means are provided to prevent the crossflo water and ions between the channels.

Pref. this is achieved using sepn. layers of inert imperme material with a high dielectric constant and smooth surfaces. pref. plastics film (polyethylene) plastics plates, ceramics or gla used. The capillary material is pref. one of paper, asbestos, w synthetic felts, polyester or polypropylene woven or non-woven

RICH-★ D15 03588 D/03 ★US 424
Aeration appts. with axial flow impeller - drawing water form bottom and returning it horizontally adjacent surface
RICHARDS OF ROCKFOR 18.05.79-US-040460 (11.12.78 968439)
(30.12.80) B01f-03/04 B01f-13/02 C02f-07
18.05.79 as 040460 (9pp295)
A body of water is aerated by drawing a flow of water from bottom and directing it through a conduit into a mixing cham Here a pressurised oxidising gas is introduced from at least divergent angles. The gas is injected through ports sp circumferentially about the chamber.

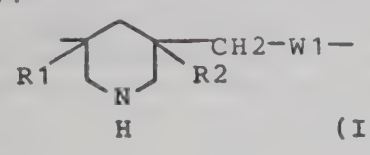
The injected gas creates turbulence and increases displacement of pollutant gases with the oxidising gas. The flo aerated water is returned to the body of water horizontally adja the water surface. The methods and appts. may be used for aeration of waste water or sewage.

TDVC-★ D15 03589 D/03 ★US 424
By/pass water softener system - with diverter valve directing w either to outlet or suspended water softener
TDV CO 14.06.79-US-048453
(30.12.80) C02b-01/16
14.06.79 as 048453 (6pp295)
A by-pass water softener system includes a water soft comprising an elongate tube, housing ion exchange resin. The r is held fixed by screened retainers, and the ends of the tube closed caps each having a port.

The tube includes a hanging device. A diverter valve includ single inlet and dual outlet. Water from the inlet is directed selected outlet. One of the outlets is connected to a water distrib while the second is connected by a hose to the inlet of the w softener.

The appts. can deliver unsoftened or softened water.

D15 87961 B/49 = US 4242-208
meable water-desalination membrane - contg. microporous coated with piperidine ring-contg. polymer crosslinked at surface (NL 26.11.79)
N KK 22.05.78-JP-059881
*01 + P42 (30.12.80) *DE2920-772 B01d-13 B05d-05 C08c-19/22*
d-39
s 039559 (45pp937)
ermeable composite membrane, used for desalination of r brackish water by reverse osmosis, comprises a rous substrate to one side of which is deposited from soln. a nipermeable film. This film is prepd. by interfacial ing of a polymer contg. recurring units of formula (I) and a tional cpd. contg. at least two functional gps. chosen from alide, sulphonyl halide, isocyanate, N-haloformyl, nate, and acid anhydride.
R1 and R2 are H or CH3; W is either a direct bond or a l gp. -SO2-.



(I)

D15 82928 B/46 = US 4242-209
r sepg. oil and water - having an anti:turbulence member of wound corrugated strip sepd. by non-corrugated strip or sh
H GEURTSEN DEVEN 09.05.78-NL-004982
*(30.12.80) *GB2020-189 + B01d-21/10*
as 031292 (6pp1376)
rd appts. for sepg. immiscible liquids consists of a vertical o which the mixt. is fed at the middle, the lighter liq. rising to er and the heavier sinking to the bottom of the tank; and flow ors in the tank in the form of vertical passages at the feed ich prevent surges of liq. between the upper and lower part nk caused by turbulence. The mixt. is fed through two sets of s immediately above and below the passages.
nd water can be sepd. on board ship, irrespective of sea ns.

D15 32964 Y/19 = US 4242-289
with water ejector entrainment - having an inner pressure er with jets discharging through outer chamber with air
M A 31.10.75-DE-548754
*2.80) *DE2548-754 B01f-03/04*
as 039138 C.i.p.4155959 (+ 1.11.76-US-737399) (8pp1376)
sible aerator consists of an electric motor in one housing, impeller driven by the motor in a second housing into which liquid is drawn. The liquid inlet and impeller shaft opening in the second housing are aligned. The liquid is discharged from radial streams from nozzles in the second housing. The streams are aerated before leaving the nozzles.

BECI ★ D15 03626 D/03 ★US 4242-298
Clearing polysaccharide ester membranes - with a clearing solvent having reduced toxicity
BECKMAN INSTRUMENTS INC 09.07.79-US-055585
A11 J01 (30.12.80) B29b-11/22
09.07.79 as 055585 (3pp1473)
Clearing a polysaccharide ester membrane comprises rinsing the membrane with a clearing solvent comprising two components, then drying the rinsed membrane. First component (a) is alcohol(s), ketone(s), ether(s), and ester(s). Second component (b) is methyl acetoacetate, ethyl acetoacetate, acetol, 2-ethoxyethanol and 2-ethoxyethyl acetate. (a) has a b.pt. of less than 120 deg.C at 760 mm.Hg. This is less than the b.pt. of (b)
Membranes may be used for filtration or, more specifically, as a support media for an electrophoretic process. Solvents employed as (b) of the clearing solvent are less toxic than solvents used previously.

SIEI D15 42426 B/23 = US 4242-301
Determn. of dissolved organic solids content in water - by oxidn. with potassium di:chromate in reaction chamber with automatic drain valve
SIEMENS AG 01.02.78-DE-804287
*J04 S03 S05 (30.12.80) *BE-873-868 G01n-01/10*
18.01.79 as 004370 (5pp1358)
A reaction housing for an automatic analyser, partic. for temp.-controlled oxidation of organic substances in water with potassium bichromate, includes a reaction chamber with top inlet and bottom outlet, and a column connected to the chamber top and with a cooling jacket.
A thermostatically controlled heating bath partially or wholly surrounds the chamber and an automatic valve in the outlet has a cap normally sealing the outlet mouth and extends below the bath for completely draining the chamber. The valve and outlet pref. have mating ground conical surfaces, and the cap is carried by a tappet push rod passing through a cylinder plate and directly connected to a piston, which is biased away from the plate by a spring between plate and piston.

See Also

D16 DE 2924387 D16 J8 0050476 D16 J8 0050477
D16 US 4242447 D25 J5 5144412 D25 J5 5144415

D16: FERMENTATION INDUSTRY

★ D16 02036 D/03 ★BE -884-926
l kinase prepn. - by Streptomyces canus A2408 fermentation
O JOZO KK 26.08.80-BE-884926
(16.12.80) C12n C12q
as 884926 (20pp288)
ycerol kinase enzyme which converts, with ATP, glycerol into a-glycerophosphate, has a mol. mass of 72000, isoelectric f 4.5, optimal pH range 9-10, stable at pH 5.5 to 10, and stable 5 deg.C. It is prepd. by fermentation of Streptomyces canus erobically in a suitable medium. The organism was isolated soya-bean field in Japan. The organism is grown at 25-30 or 1-3 days and the enzyme is isolated from the mycelium.
enzyme produces L-alpha-glycerophosphate which after n. is electrophoretically homogeneous and useful in diagnosis yceride metabolism.

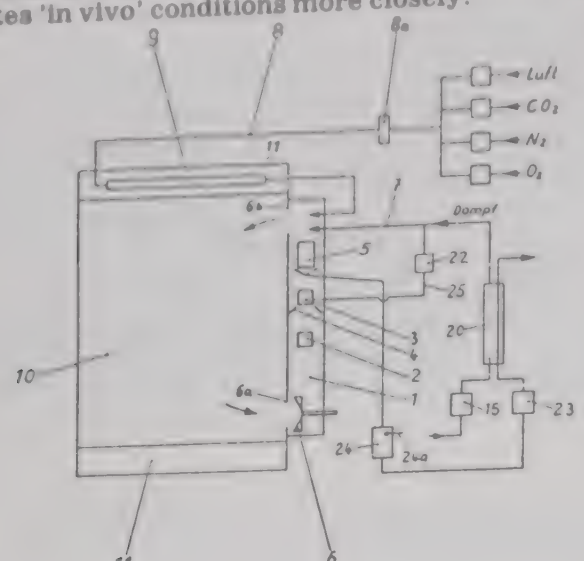
★ D16 02087 D/03 ★DE 2924-181
rganism growth fermenter - with rotating froth breaker paddle mixer guide cylinder
ERMEDICAT GMBH 15.06.79-DE-924181
01.81) C12m-01/06
as 924181 (24pp39)
enter for the growth of microorganisms with a paddle mixer, ced from the bottom to operate inside a guide cylinder with en ends includes a rotating froth breaker above the top end of de cylinder. The froth breaker has radial ribs with vertical s at different radial distances from the centre in one rib red with the next. Connections for the insertion of probes are ed in a ring between the cylindrical fermenter wall and its plate.
fermenter can be filled completely with a mixt. of nutrient nd gas (oxygen) without creating zones permanently filled with froth. The uniform gas distribution prevents any wall growth of cultures and results in better space utilisation.

SAUF/ ★ D16 02095 D/03 ★DE 2924-387
Methane generation from organic residues - by homogenising and warming biomass until it can be pumped into fermenter, used to produce power, on e.g. farms, and also manure
SAUFF H 16.06.79-DE-924387
E17 (D15) (08.01.81) C02f-11/04 C05f-03 C05f-11 C12m-01
16.06.79 as 924387 (12pp1053)
Prodn. first comprises homogenising the biomass until it can be pumped. It is then recycled through a heater until the required temp. is reached before being pumped into the fermentation vessel. In order to avoid the formation of a floating mass of solids, the vessel can be emptied back into the mixer and then pumped back via a threeway motorised valve, refilling from the bottom. The waste solids are run off via a heat exchanger to recover their heat. The whole unit operates completely automatically.
For recovering CH4 which can be used to power engines etc. on farms. Allows valuable fuel and very valuable manure to be produced from farm waste such as animal excrement, faeces, greenstuff, other vegetable residues such as algae and plants grown for energy.

HERA ★ D16 02096 D/03 ★DE 2924-446
Cell and tissue cultivator - with gas, temp. and humidity control and sterilised steam injection into incubator
HERAEUS W C GMBH 18.06.79-DE-924446
S05 (08.01.81) C12m-01/04 C12n-01 C12n-05/02
18.06.79 as 924446 (20pp-)
Human and animal cells or tissues or microorganisms are cultivated

in containers inside an incubator in which a controlled atmosphere of carbon dioxide, air, oxygen or nitrogen is maintained at a given humidity and temperature. An external evaporator produces sterilised steam which is cooled to the desired temperature and continuously fed into the incubator. Sensors monitor the CO2 and O2 concentration, temperature, humidity and pH-value.

This permits a wide range of biological atmospheric conditions and simulates 'in vivo' conditions more closely.



BADI ★ D16 02101 D/03 ★DE 2925-009

Co-lyophilised compsn. contg. dextran. - and pharmaceutical or diagnostic reagent, giving hard, abrasion resistant mouldings

BASF AG 21.06.79-DE-925009

B04 S03 (08.01.81) A61k-09/08 C12q-01 G01n-33

21.06.79 as 925009 (7pp1251)

Compsn. consists of a co-lyophilisate of a material (A) and dextran (B), opt. together with other auxiliaries. (A) is specifically an analytical reagent or a pharmaceutically-active cpd. These compsns. are made by filling an aq. soln. contg. (A), (B) plus auxiliaries into moulds, then freeze-drying.

The compsns. are useful as diagnostic agents and pharmaceuticals. Unlike normal lyophilisates, they are hard and abrasion resistant and can be used to formulate sensitive cpds. such as proteins and enzymes as solids. If not excessively dry they can be compressed without disintegration to give tablets with a slower speed of dissolution than the unpressed material.

HENK ★ D16 02131 D/03 ★DE 2925-427

Microbial protease prodn. - by fermentation of Bacillus licheniformis P-300

HENKEL KG AUF AKTIEN 23.06.79-DE-925427

(08.01.81) C11d-03/38 C12n-01/20 C12n-09/50

23.06.79 as 925427 (25pp280)

In a new process for the prodn. of protease, a strain of Bacillus licheniformis P-300 is cultivated in a nutrient medium contg. assimilable carbon and nitrogen sources, and proteolytic enzyme produced during the cultivation is subsequently separated off.

A protease of high enzymatic activity is produced in high yield. Due to its high enzymatic activity and its wide stability spectrum (esp. towards chelating agents such as nitrilotriacetic acid and EDTA), the protease can be widely used in industrial cleansing, e.g. in breweries, dairies, meat and fish processing plants, and other food processing plants.

BEHW ★ D16 02171 D/03 ★DE 2926-271

Reagent for detecting cpds. with peroxidase activity - esp. haemoglobin in urine, contains pyridine deriv. as accelerator

BEHRINGWERKE AG 29.06.79-DE-926271

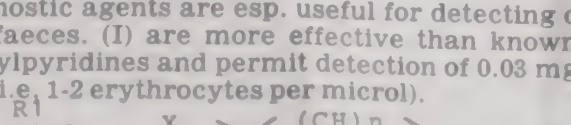
B04 J01 S03 (S05) (08.01.81) C07d-221/02 C12q-01/28 G01n-31/22 G01n-33/72

29.06.79 as 926271 (10pp1251)

Compsn. for improving the sensitivity of detection of cpds. with peroxidase activity comprises,or contains, a heterocycle of formula (I), or its salt. (X is CH2, CHR1, CR1R2, CO or a direct bond. m and n are each 0-3, but must total 3. When X is CO or a bond, each A is H, and when X is CH2, CHR1 or CR1R2, they are each H or together a bond between the two rings. R1 and R2 are H, halo or 1-4C alkyl).

Diagnostic agents consisting of a carrier, colour former, hydroperoxide, stabiliser, detergent and as activator a cpd. (I) are also new.

The diagnostic agents are esp. useful for detecting occult blood in urine and faeces. (I) are more effective than known accelerators such as vinylpyridines and permit detection of 0.03 mg haemoglobin per l urine (i.e. 1-2 erythrocytes per microl).



ALFA ★ D16 02194 D/03 ★DE

Microbiological liq. manure treatment control - by aerator transfer unit regulated for optimum temp.

ALFA-LAVAL AGRAR GM 04.07.79-DE-927015

C04 (08.01.81) C05f-03/06

04.07.79 as 927015 (16pp39)

During a microbiological conversion process in a liq. manur solid components of the aerated manure are deco aerobically and develop heat. A first heat transfer unit, imm the liq., carries a heating medium (water) and is coupled out pit to a second heat transfer unit for heat recovery or dissip cooling. The flow rate of the heating medium is controlled to manure temp. at the optimum level for the therm microorganisms.

This conversion eliminates bad smells and improves the fe properties of the processed manure. The developed heat recovered at a regular rate for the prepn. of hot water.

FARB ★ D16 02228 D/03 ★DE 2

Optically pure alpha-amino-heterocyclyl-acetic acid derivs. - by treating corresp. racemic ester with immobilised prot enzyme in 2-phase medium

BAYER AG 07.07.79-DE-927534

B03 (08.01.81) C07d-231/10 C07d-233 C07d-261 C07d-277/2 307/54

07.07.79 as 927534 (20pp280)

New optically pure amino acid derivs. are cpds. of fo (R3)(R4)N-C'HR1-CO-R2 (I) in which the C' has either D- configurations; R1 is an opt. unsatd., opt. substd. heterc residue contg. 1-4 identical or different heteroatoms selected O,S and N, and to which a benzene ring may be fused; R2 is OH alkoxy or -N(R5)2; R3 and R4 are H, acyl, or 2-4C alkenyl subs 1-4C alkoxycarbonyl; and R5 is H or 1-4C alkyl.

The optically active cpds. (I) are useful as intermediat pharmaceuticals, esp. optically pure acylated beta-l antibiotics.

SAKA ★ D16 02266 D/03 ★DE 30

Cephalosporin antibiotic cephamycin C microbiological prodn cultivation of streptomyces SP. OFR1022 (NL 17.12.80)

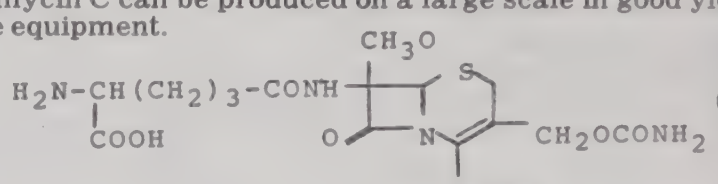
OTSUKA PHARM KK 15.06.79-JP-075830

B02 (08.01.81) C07d-501/57 C12p-01 C12p-35/08 C12r-01/46

13.06.80 as 022250 (29pp280)

In a new process for the prodn. of cephamycin C (I), the orga Streptomyces sp. OFR 1022 is cultivated in a culture medium cephamycin C accumulated in the medium is recovered.

Cephamycin C is a known antibiotic. Streptomyces OFR 102 higher productivity of cephamycin C than previously microorganisms, and has relatively high optional cultivation t so that cultivation can be carried out without cooling. Consequ cephamycin C can be produced on a large scale in good yields simple equipment.



ORTH ★ D16 02268 D/03 ★DE 30

Polymer bound erythrocytes and stroma - attached by diazo useful for separating pure blood group antibodies

ORTHO DIAGNOSTICS 13.06.79-US-048212

A97 B04 S03 (S05) (08.01.81) C07g-07 G01n-33/54

13.06.80 as 022278 (19pp1251)

Polymer-bound erythrocytes or stroma made by reaction w diazotised, aromatic amino gp. contg. polymer esp. derived polystyrene, are new.

These prods. are used for specific separation or detecti antibodies by forming antibody-antigen complexes. T complexes can then be treated with acid of pH 2.7-3.3 to releas antibody which is then sepd.

The compsns. are esp. useful in high-yield prodn. of very blood gp. antibodies for use in blood group and rhesus f determinations. Unlike fresh erythrocytes, these polymer-b prods. can be regenerated and repeatedly reused.

INSP ★ D16 02329 D/03 ★DE 302

High activity vaccinating antigen fractions - are surface anti prepd. by extracting bacteria with buffer then purifcn.

INST PASTEUR 29.06.79-FR-016851

A96 B04 K08 (S03) (08.01.81) A61k-39/02 C07g-07 C12n-01/20 C 33/54

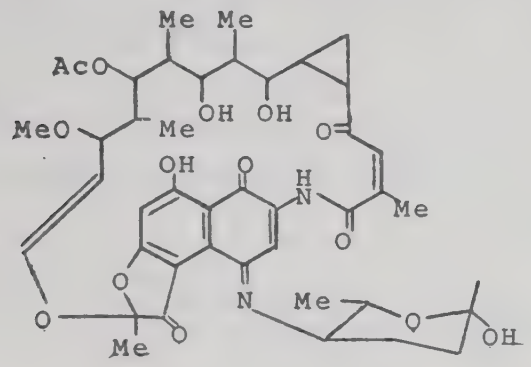
27.06.80 as 024282 (37pp1251)

Vaccinising antigen fraction (A) of very high immunising power isolated from a pathogen culture, comprises an oside portion w is about 50% covalently bonded to a protein portion. When exam by immunodiffusion in gelose against an immune serum, der from an animal infected with the same pathogen, it shows a 'dist

ne near the antigen well or source.
line is shown by labelling with iodine 125 (chloramine T ure) to contain amino acids, and is not modified by treatment rotease but becomes more diffuse when treated with NaOH. ditional 'diffuse' line between tbe antigen and antibody wells so be present; it indicates the participation of polyosides.
re useful in vaccines and for raising new, specific antibodies are useful as reagents for characterising and assaying ns.

★ D16 02339 D/03 ★DE 3025-098
. of fermentable glucose solns. for ethanol prodn. - by nent of hydrolysate from lignocellulosic material
ERICAN CAN CO 02.07.79-US-053979
01.81) C12p-07/06
0 as 025098 (39pp367)
n. of glucose solns. for fermentation to ethanol is carried out by eam-stripping volatiles from a hydrolysate produced by acid lysis of a lignocellulosic material; (b) adjusting the pH to 10- adding CaO and keeping the mixt. at this pH for 1-3 hr before ating the ppte.; (c) adjusting the pH to 5-7 by adding a mineral and (d) adjusting the glucose concn. to less than 150 g/l, with oviso that the mineral acid added in step (c) must be H3PO4 the glucose concn. is more than 50 g/l.
treatment removes components which are toxic to ethanol cing yeasts, e.g. acetic and formic acid, 5- xymethylfurfural (HMF) levulinic acid and furfural.

D16 33598 F/00 = DS 1667-923
BIOTIC B-2847
KEDA CHEMICAL IND KK 09.09.67-JP-057777 (25.02.67-JP-976)
*4 (27.11.80) *NL6802-679 + C07d-498/08 C07g-11 C07h-17/08*
68 as 667923 (16pp47)
iotics 8-2847 Y of formula (I), and 8-2847R of formula (II), are In (III) the quinoneimine ring and its 4-substit. of (I) are ced by the corresp. hydroxy-benzene ring with a 4-(2-hydroxy-5- roxyethyl) pyrrolidine-1-yl) substit. Prepn. of these antibiotics rises propagation of Streptomyces tolypophorus nov. sp. ATCC in a suitable culture medium under aerobic conditions at 20-45 followed by extn. with an organic solvent at pH 2-8 and atographic prepn., isolating II in the presence of L-ascorbic 1 mole per mole I). The prods. are dispersed with the usual naceutical additives and carriers.(DS)



D16 23723 C/13 = EP --20-355
matic process requiring regeneration of reduced enzyme - with ing equivalents derived electrochemically
ATIONAL RES DEV CORP 15.08.78-GB-033388
*4 (07.01.81) *WP8000-453 C12p-01 C12p-07/02*

D16 07364 C/05 = EP --20-356
urellosis vaccine for cattle and sheep - contains A1 serotype lar extract and A2 serotype heat killed entire Pasteurella olytica antigenic material
LMOUR N J L 24.08.78-GB-034525
*4 C03 (07.01.81) *BE-878-430 A61k-39/10*

D16 34584 C/19 = EP --20-488
mn. of oxidisable substrate, esp. lactate, with enzyme ode - using macromolecuiar electron acceptor retained by ermeable membrane
TRIC SOC ETUD TEC 24.10.78-FR-030537
*J04 S03 (07.01.81) *WP8000-850 C12q-01/32 G01n-27/30*
9 as 901326 E(AT CH DE GB NL SE)
00850)

INVE- D16 38236 C/21 = EP --20-589
composting container with outlet opening - to which treated material is delivered by reversal of stirrer rotational direction
INVENTOR INVEST AB 01.02.79-SE-000891 (06.11.78-SE-011469)
*P28 (07.01.81) *WP8000-961 A47k-11 C05f-03/06*
05.11.79 as 901551 E(DE FR GB)
(WP8000961)

BATT D16 41486 C/23 = EP --20-623
Assaying hydrogen peroxide, peroxidase or their precursors - by measuring rate of release of fluoride ions from organic fluoro cpd.
BATTELLE MEMORIAL 15.11.78-CH-011718
*B04 J04 (07.01.81) *WP8001-081 C12q-01/28*
13.11.79 as 901604 E(AT CH DE FR GB LU NL SE)
(WP8001081)

PFUL/ D16 49760 C/28 = EP --20-682
Anaerobic fermentation plant to produce methane and by/products - from long rectangular vessel with longitudinal axis inclined to horizontal
PFULG F 22.12.78-CH-013129
*C04 E17 (07.01.81) *WP8001-286 C12m-01*
20.12.79 as 900033 E(AT CH DE FR GB)
(WP8001286)

KONN D16 90824 C/51 = EP --21-468
Plasmid conferring resistance to Streptomycin and Neomycin - useful as cloning vehicle, for gene inactivation in host to leave marker
GIST-BROCADES NV 11.05.79-GB-016377
*B04 (07.01.81) *GB2048-894 C12n-15*
12.05.80 as 120580 (32pp1248) (E) 6.Jnl.Ref E(AT BE CH DE FR GB IT LI LU NL SE)
Plasmid conferring resistance to streptomycin (SmR) and neomycin (NeoR) upon its host, or after having taken up a foreign DNA fragment at one of its restriction sites with loss of its SmR or NeoR phenotype, still capable of replicating and expressing genetic information in its host, is new. A host into which the plasmid has been inserted is also new..
The plasmid is useful as a cloning vehicle. Gene inactivation with the plasmid is possible in a host, e.g. Bacillus spp., to leave a second selectable marker. The plasmid permits insertion, replication, expression and amplification of DNA fragments from a wide variety of sources in the host, so that synthetic output of the selected host cells can be controlled.

ANVR ★ D16 02400 D/03 ★EP --21-540
Simultaneously contacting gas, liq. and divided solid phases - for mass transfer operations, e.g. extn., and biochemical reactions, e.g. fermentation
AGENCE NAT VALORISATION 29.06.79-FR-017430
J04 (07.01.81) B01d-11/02 B01d-15 B01j-08/16
23.06.80 as 200595 (20pp448) (F) FR1444959 FR2371227 DS1205497 US3241520 FR2073685 GB1379578 US2567474 E(BE CH DE GB IT LI NL SE)
The process takes place in a chamber with a porous base through which gas can be forced upwards and which retains liq. in the chamber. A deflector surface extends upwards from the base, at an angle sloping downwards towards the base.
Gas rising through the base lifts some of the solids clear of the base. The cleared space is refilled with other solids rolling down the deflector surface. Periodic pulsations of gas injected via the base thus produce a circulatory motion of the solids about an approximately horizontal axis. The quantities of liq. and solid phase in the chamber are such that in repose the solids cover the base of the chamber and the liq. cover the solids.
The density of the solid phase is pref. between 1.0 and 1.4 that of the liq.. The chamber base is pref. covered with at least two layers of divided solids. The vol. of liq. in the chamber is pref. at least 5 times the vol. of solids covered by the liquid..
The process can be applied to mass transfer operations, e.g. adsorption or extraction, as well as to biochemical reactions such as aerobic and anaerobic fermentations. Extremely intimate contact is achieved, without danger of flotation of solid phase. The solid phase does not agglomerate.

AHSC D16 01965 D/02 = EP --21-572
Substrates for turbidimetric lipase assay - comprising lyophilised emulsion of tri:glyceride, buffer, surfactant and bulking agent
AMER HOSPITAL SUPPL CORP 04.06.79-US-045467
*A96 B04 S03 (07.01.81) *WP8002-697 C12q-01/44*
06.05.80 as 301476 (12pp367) (E) FR2073537 FR2350604 US3917515 EP--14252 E(AT BE CH DE FR GB IT LI LU NL SE)
Substrates for use in a turbidimetric assay for lipase comprises lyophilised emulsions contg. (a) 0.5-5 (pref. 1.0-2.5) wt.% of a lipase-hydrolysable triglyceride, (b) a buffer providing a pH of 7-10, (c) 10-40 (pref. 15-30) wt.% of a surfactant, and (d) 20-60 (pref. 30-50) wt.% of a

bulking agent, e.g. polyvinylpyrrolidone..

Lipase assays are used for diagnosis of pancreatic dysfunction.

The substrates are readily reconstituted by mixing with water, are stable, and are highly reproducible (initial turbidities are controllable within +-10%).

ICIL ★ D16 02435 D/03 ★EP --21-606

Liquid-permeable rotor axially fed with liquid - reacting with rotor under centrifugal force, e.g. for chromatography or biological reactions

IMPERIAL CHEM INDS LTD 01.06.79-GB-019251

J04 P41 (07.01.81) B01j-19/18 B04b-05 C12n-11

23.05.80 as 301725 (27pp295) (E) DE2017351 DE2336591 FR1202388 AT-296905 E(AT BE CH DE FR GB IT LI NL SE)

A liquid-permeable element is encased in a solid rotor provided with an axial feed conduit. The rotor revolves at 150 m sec-2 and the resultant centrifugal force urges an axially-fed liquid to pass through the rotor pores. During its passage through the rotor the liquid reacts with the element.

Preferably the element has a voidage of 80% and preferably has an interfacial area of 100 m2/m3. Preferably a gas is introduced at the circumference of the rotor and passes countercurrent to the liquid..

The element may catalyse the liquid or physically- or chemically-bond to the liquid. The apparatus may be used for chromatography or the liquid may be biologically reacted e.g. by using an enzyme.

The centrifugal force urges the liquid through the element.

ELIL D16 90140 C/51 =EP --21-684

Antibiotic A-42355 obtd. by cultivation of aspergillus nidulans - var. roseus (NRRL 11440), comprising factors A,B,D and H of antibiotic A-30912 factor A is echinocandin B

ELI LILLY & CO 03.03.80-US-126078 (08.06.79-US-046744)

*B02 C02 (07.01.81) *BE-883-592 +C07c-103/52 C12p-21/04 C12r-01/66*

06.06.80 as 301912 (45pp395) (E) US4024245 US4024246 E(DE GB LU NL SE)

Production of an antibiotic mixture, A-42355, containing factors A, B, D and H of antibiotic A-30912 and the separation of the mixture to give the individual factors comprises (a) cultivation of Aspergillus nidulans var. roseus NRRL 11440 in a medium containing assimilable carbohydrates, nitrogen and mineral salts by immersed aerobic fermentation until a substantial concn. of antibiotic is present; (b) sepn. of the antibiotic mixt. A-42355 from the culture medium and (c) opt. sepg. the factors A, B, D, H of A-30912 from the mixt. A-42355.

Biologically pure cultures of NRRL11440 are new..

The products are antibiotics.

SEKI ★ D16 02534 D/03 ★EP --21-817

Liquid chromatographic filler of particulate synthetic polymer - for sepn. of hydrophilic proteins, enzymes, vitamin(s) etc.

SEKISUI KAGAKU KOGY 06.08.79-JP-100363 (22.06.79-JP-079494)

A96 B04 J04 (07.01.81) B01j-20/22

20.06.80 as 302102 (27pp1248) (E) FR2355860 US3983001 US3531463 US3663467 FR2369290 E(DE FR GB IT NL SE)

Liquid chromatographic filler comprises a particulate synthetic polymer and is characterised that in chromatography with polyethylene glycol as sample and water as eluent, the elution time of the sample increases with a rise in temp.

The polymer pref. has both non-dissociatable hydrophilic gps. and hydrophobic gps..

The filler is esp. useful for liquid chromatography of hydrophilic substances with good accuracy when water alone is used as eluant. The substances include proteins, enzymes, vitamins and amino acids, and esp. plasma proteins.

INSE- ★ D16 02605 D/03 ★EP --22-005

Selective protein sepn. by affinity chromatography - esp. for removing unreacted labelled component in enzyme immunoassay systems

INSERM INST NAT SAN 21.06.79-FR-015992

A96 B04 S03 (S05) (07.01.81) C12q-01 G01n-33/54

19.06.80 as 400913 (30pp1251) (F) DE2719772 US3502545 FR2379552 FR2074027 FR2184054 1.Jnl.Ref E(AT BE CH DE FR GB IT LI LU NL SE)

Selective sepn. of a protein (A) having affinity for a particular ligand (L), from a soln. contg. other substances also with affinity for (L) but of higher mol. wt. than (A), comprises filtering the soln. through a gel which (a) excludes higher mol. wt. cpds. and (b) is coupled to (L).

Specified gels are polyacrylamide, agarose (or their mixt.), dextran or polysaccharides and has ligand content 25-200, pref. about 50, times the association constant of (A) with (L).

In an enzyme assay system (direct or competitive) in which at least one bonding agent (B) is reacted with an enzyme-labelled substance (L'), excess (L') is sepd. by filtering through such a gel. The enzyme activity of the filtrate is then measured..

The method is esp. useful where (B) is an antigen, antibody, transport protein or hormone receptors, esp. in ass progesterone, human placental lactogen hormone or foetoprotein (FP).

The method avoids the need for an immunoadsorbant and associated washing and centrifuging stages. It is thus parti suitable for automation.

TESS/ ★ D16 02673 D/03 ★FR 24

Hydrophonic culture of animal feed grains - in which the grai stored, germinated and cultured in a magnetic field

TESSIER M P 20.03.79-FR-007002

C03 P13 (21.11.80) A01g-07 A01g-31 A23k-01

20.03.79 as 007002 (23pp520)

A process for the hydroponic culture of herbage, useful as an a feed, comprises a) storing seeds or grains in an electrostatic the stored grain being kept around the cathode, and the grain about to be germinated being stored around the anode, b) cult the germinated grain in culture vessels. The two steps are ca out in the presence of air, water, and natural light at 17 to 26 d Germination and culture are carried out in vessels which subjected to cosmic and telluric waves, and the water use germination and culture has been passed through a magnetic by passage around electrodes emitting cosmic and telluric w and has been charged with substances of which the electrodes been made or with which they have been coated. The water has been treated with an enzyme mixt. which penetrates the cell wa the grains and comprises 35000 units per g of hemicellulase 9000 per g of cellulase 3250 units per g of pectinase 300 units per g of glucanase 15 units per g of xylanase 10000 units per g of acid prot 15 units per g of pectin-esterase. Treatment with these m enzymes may be followed by treatment with gibberellic acid.

The process gives a much higher yield of food at only a sli increased cost. It requires no fertilisers, fungicides, pesticides and so is ecologically safe.

SMIK D16 03877 Y/03 =GB 158

Attenuated influenza vaccine contg. H3N2 strain - i.e. virus s A/P/76/7 which is resistant to serum inhibitors

SMITH KLINE-RIT (RECA) 18.06.76-BE-843094 (18.06.78 168041)

*B04 (14.01.81) *BE-843-094 A61k-39/14*

15.06.77 as 024913 Add to 1461188 (3pp937)

Attenuated influenza virus vaccine effective by intran administration comprises an effective amt., pref. at least 10 pov EID50 strain per dosage unit, of serum inhibitors resistant stra H3N2 influenza virus, the serum inhibitors resistant strain is P/76/7 virus strain. The vaccine is supplemented with a stabi and freeze dried.

The vaccine is prepd. by incubating P/76/7 in the allantoic ca of hen's embryonated eggs and harvesting the resulting v material.

The vaccine is adapted to be as close as possible to the cur dominant virus.

MERI ★ D16 02772 D/03 ★GB 205

Xanthan gum of high solubility prepd. from beer - by treating an alkanol (azeotrope), used in dry food mixes or aq. explo compsns.

MERCK & CO INC 24.05.79-US-042375

A11 (A97) (14.01.81) C12p-19/06

22.05.80 as 016974 (2pp904)

Xanthan gum is prepd. from a xanthan gum beer by treating wit times its vol. of a 1-4C alkanol at 20-33 deg.C or an aq. azeotrop the alkanol at 20-27 (esp. 23) deg.C. Pref. 2-5 times the vol azeotrope is used, it being an iPrOH-water mixt. Aq. explo compsns. can be made contg. 0.1-3 wt.% gum, or dry food compsns. can be made contg. 0.2-1.5 wt.% gum.% The gum improved solubility, esp. in high salt solns; for use in drink mi soups, instant deserts, pet food, etc.

INSF ★ D16 D/03 ★J5 514

Selective extn. of pigment contained in blue green algae

INST FRANCAIS DU PETROLE 06.04.79-FR-009120

E24 (12.11.80)

JAOR ★ D16 02908 D/03 ★J5 514

Water prepn. for wine and brewing use - by softening it usi strongly acidic cation exchange resin, adding calcium salt, treating with a strong basic anion exchange resin

JAPAN ORGANO KK 26.04.79-JP-050925

(12.11.80) C12g-03/02

26.04.79 as 050925 (4pp5)

Method comprises (a) softening the water contg. salts with H-f strongly acidic cation exchange resin, (b) adding calcium selected from calcium chloride, calcium phosphate and calc carbonate to thus obtd. acidic soft water and (c) treating obtd. w with OH-form strongly basic anion exchange resin.

Generally wines such as sake, beer, etc. other than wines alkaline fruits, are acidic foods and recently from health viewp

oods are expected. By the invented method the water of ving use which has constant alkalinity can be easily obtd. t the wines which are alkaline and excellent in colour, taste ır, can be prepd.

D16 02909 D/03 ★J5 5144-877
epn. for wine and brewing use - by adding calcium chloride hate to desalted water and treating with hydroxyl-form basic anion exchange resin
N ORGANO KK 26.04.79-JP-050926
80) C12g-03/02
s 050926 (3pp5)
comprises adding calcium chloride or calcium phosphate to water and treating the water with OH-form strongly basic change resin.
ally wines such as sake, beer, etc. other than wines of fruits' ic foods and recently alkaline foods are expected from iewpoint. Water of wine-brewing use which has the proper y for obtaining alkaline wines, can be obtd. easily and with it es which are alkaline and excellent in colour, taste and can be prepd.

★ D16 02910 D/03 ★J5 5144-879
ng unpleasant smell specific to sake - by passing through sea ol. sieve 5A, cationic and anionic exchange resins, zeolite, l, celite, alumina and active carbon
AI T 26.04.79-JP-052142
1.80) C12h-01
as 052142 (3pp5)
is to remove the sulphur cpd. and the phosphorus cpd. in lectively which cause the formation of spoiled persimmon- ell and general unpleasant smell and the acidification of nd is characterised by passing sake through a column, contg. d, molecular sieve 5A, cation exchange resin, zeolite, silica ion exchange resin, celite, alumina and active carbon in and blowing inert gas such as nitrogen gas or argon gas into ated sake.
e method above 90% of the sulphur cpd. and the phosphorus sake which cause the formation of unpleasant smell and the ation, can be easily removed and excellent alkaline sake can

★ D16 02911 D/03 ★J5 5144-894
sml-91-prodn. - by culturing Streptococcus mitis, for use as orpuscle agglutinant(s)
I STAR HAMIGAKI K 26.04.79-JP-051922
B04 (12.11.80) C12p-21 C12r-01/46
as 051922 (4pp69)
of microbial lectin (Phytohaemaglutinin) SML-91 comprises ng Streptococcus mitis genus microorganisms in culture n. Pref. the microorganism is Streptococcus mitis ATCC 9811. -91 agglutinates human erythrocytes independently to blood nd bonds to sugar protein in human parotid gland saliva and specifically to D-galactose and sugar chain having D- se at non-reduced terminal. The lectin is expected to be as reagent in clinical testing, haematology, immunology ch and pharmaceuticals as carcinostatic drugs.

★ D16 02912 D/03 ★J5 5144-895
ial lectin SSL-91 prodn. - by culturing microbe of coccus sanguis genus
N STAR HAMIGAKI K 26.04.79-JP-051923
B04 (12.11.80) C12p-21 C12r-01/46
9 as 051923 (3pp69)
d comprises culturing microbial lectin-producing microbe of coccus sanguis genus in culture medium to yield and ulate microbial lectin SSL-91 and sepg. out resultant lectin . Pref. the microbe is Streptococcus sanguis ATCC 10557

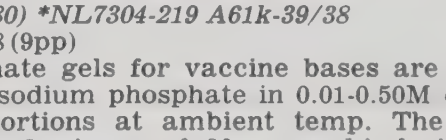
91 agglutinates human erythrocytes independent of blood type nds to sugar protein in human parotid gland saliva and bond cally to D-galactose and sugar chain having D-galactose at duced terminal. The lectin is useful as reagent applied in the of clinical tests, haematology, immunology research and aceutical as carcinostatic drug.

★ D16 02913 D/03 ★J5 5144-896
losporin antibiotic prodn. from Cephalosporium organism - in culture medium contg. methionine and one or of S-sulpho-cysteine, ammonium sulphate, sulphite, lphate and metabisulphite
KEDA CHEMICAL IND KK 24.04.79-JP-051072
2 *(12.11.80) C12p-35 C12r-01/74*
9 as 051072 (9pp69)
roducing Cephalosporin antibiotics where Cephalosporin otic-producing Cephalosporium microorganisms are ated in culture medium, to the culture medium is added (1) at least one of S-sulphocystein, ammonium sulphate, sulphite, thiosulphate and metabisulphite and (2) methionine.

Typical Cephalosporium microorganisms used are, e.g. Cephalosporium polysleurum 199 (FERM-P No. 1159; IFO 9394; ATCC 20359), C.polyalerium Y 505 (FERM-P No. 1160; IFO 9535; ATCC-20360), C.acremonium 2M-16 (FERM-P No. 2283; IFO 9999; ATCC-20425), etc.

RHON D16 77554 X/42 = J8 0049-259
Mineral supports grafted with silanes - carrying an aromatic amine gp., modified with adenine derivs., useful chromatography agents
RHONE-POULENC INDUSTRIES 04.04.75-FR-010597
*A97 B04 J01 + P42 P73 (A26) (11.12.80) *BE-840-310 B01d-15/08 C12q-01 G01n-31/08 + B01j-20*
02.04.76 as 037047 (5pp-)
Mineral supports carrying silica grafts with aromatic amine substituents modified by opt. substd. adenine gps. are esp. useful for affinity chromatography, which is useful for purificn. e.g of enzymes. Pref. the mineral substrate is a material contg. OH gps. with a particle size of 40 microns to 2.5mm, a specific surface of 1-600m square/g. a pore dia. of 40-10000angs. from a pore vol. of 0.5-1.8ml/g.

Pref. grafting is carried out with a silane of formula (I): or a (co)polymer of this, where A,B and C(same or different) are (m)ethoxy or (m)ethyl gps. providing that at least one of A,B and C is reactive with the OH gp. on the support material, and n is 2-4.(J51123199).



(I)

MULL- D16 44767 W/27 = J8 0049-532
Auto-aeration and -gasification of micro organism culture substrates - adjustable tubes feed air/gas into fluid in pump rotor
MULLER H 21.12.73-CH-018126 (21.12.73-CH-018125)
*J02 + Q56 (12.12.80) *DE2459-710 B01f-03/04 B01f-07/16 B01j-10 C12m-01/06*
20.12.74 as 146683 (3pp-)
Device is for auto-aerating or -gasifying fluids in containers, esp. for the aerobic propagation of micro-organisms such as yeasts, fungi, and bacteria, has a circulating pump having an enclosed centrifugally-acting rotor, and above the rotor a fluid guiding duct with a venturi constriction, at the narrowest point of which there are inlets for the gas.

Gas inlets into the constriction are formed by a number of small adjustable tubes of the same or different dia. and length, positioned in different planes, projecting at right angles into the flow and chamfered at their outlets downwards. The gas lead may be connected to a supply of compressed air. The gasification is effected without the need for compressors, and adequate quantities of air or gas thoroughly dispersed by suction are assured. (J50095861).

COLG D16 64000 T/40 = J8 0049-571
Vaccines against dental caries - contg a levan polysaccharide
COLGATE PALMOLIVE CO 22.03.71-US-126933
*B04 (D21) (12.12.80) *BE-781-047 A61k-39/09 C12p-19/04 C12r-01/46*
22.03.72 as 028223 (5pp)
Vaccines against dental caries contain polysaccharide (I) prepd. by anaerobic cultivation of a levan-forming strain of Streptococcus, esp. Streptococcus source SS2 and a liq. carrier. Pure (I) or killed cells may be used in the vaccine which contains 0.1-1.0 g) (I)/l and is administered at rates of 1-20 micro g-kg. (I) is a levan polysaccharide of m.w 16-23 x 10 power 6. (J47035121).

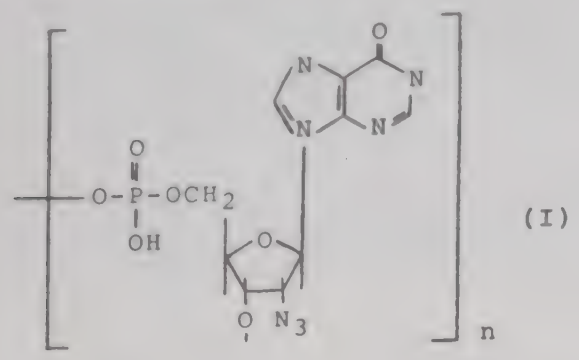
INSP D16 64840 U/43 = J8 0049-573
Calcium phosphate gels - mixed types for vaccine bases
INST PASTEUR 06.04.72-FR-012036
*B06 (12.12.80) *NL7304-219 A61k-39/38*
15.06.72 as 059098 (9pp)
Calcium phosphate gels for vaccine bases are prepd. by mixing CaCl2 and sec. sodium phosphate in 0.01-0.50M concn., rapidly, in equimolar proportions at ambient temp. The mixing must be completed within 3 mins. pref. 30 sec. and is facilitated by efficient stirring. The pH is immediately (30-90 sec), adjusted to 6.8-7.2, and the gel washed free from phosphate ions by decantation with 0.4-0.9% NaCl. It is then sterilised and the pH readjusted. Antigens may be adsorbed onto the prepd. gel, or added during the pptn. The gel approximates to Ca3(PO4)2. CaHPO4. (J49013322).

MITU D16 25063 B/13 = J8 0049-600
Poly-2'-azido-2'-deoxy:inosinic acid - used as inhibitor of reverse deoxyribonuclease and in prodn. of interferon derivs.
MITSUBISHI CHEM IND KK 26.07.77-JP-089478
*B04 (12.12.80) *J54024-899 A61k-31/70 + C07h-21 C12p-19/34*
26.07.77 as 089478 (8pp140)
Poly 2'-azido-2'-deoxyinosinic acid (polynucleotide) of formula (I) is

new.

(I) is prepd. by, e.g. polycondensating 2'-azido-2'-deoxyinosine 5'-diphosphate (II) in the presence of polynucleotide phosphorylase (PNPase). (II) is prepd by e.g. reacting 2'azido-2'-deoxyadenosine 5'-phosphate with nitrous acid to obtain 2'-azido-2'-deoxyinoxine 5'-inosine 5'-phosphate, reacting this prod. with morpholine in the presence of a dehydrating agent (e.g. dicyclohexylcarbodiimide) and substituting the prod with phosphoric acid. PNPase can be recovered from microorganisms, e.g. E. coli Axotobacter vinelandii, etc. or various animal tissues.

The polynucleotide acts as an inhibitor against reverse DNAase. The polynucleotide associated with polycytidylic acid exhibits about 4 times the activity that of the polynucleotide of polyinosinic acid associated with polycytidylic and is useful as intermediate of interferon derivs. (J54024899)



(I)

OMRO ★ D16 03169 D/03 ★J8 0049-707

Enzyme electrode e.g. for clinical urea determn. - comprises ion electrode, fixed enzyme membrane on the electrode and ion exchange membrane

OMRON TATEISI ELTRN KK 03.03.76-JP-022864

J04 (13.12.80) C12q-01/58 G01n-27/30 G01n-33/62

03.03.76 as 022864 (3pp83)

Enzyme electrode comprises ion electrode (I), fixed enzyme membrane (II) coated on (I), and ion-exchange membrane (III) covering (II) that does not permeate ions affecting (I). Used for determining physiological substances such as urea in clinical examination. (J52106791).

ASAH D16 13377 W/08 = J8 0049-826

Microbial cells sepn. - pH of microbial suspension is raised using calcium cpd. and microbes flocculated

ASAHI CHEMICAL IND KK 25.12.72-JP-129345

*(15.12.80) *J49086-584 + A23k-01 C02f-01/52 C12n-01/02*

25.12.72 as 129345 (5pp)

The pH of a microbial suspension was adjusted to more than 10 with addn. of a water insol. alk. Ca cpd. and the microbes were flocculated. The flock was grown with addn. of Fe or Al salt and sepd.

In an example a Pseudomonas was continuously cultured with aeration at 30 deg. C in a medium (pH 7.0) contg. epsilon-caprolactam 0.3, CaHPO4 0.075. MgSO4 0.025 FeSO4 0.003, MnSO4 0.002, and ZnSO4 0.002%. The cell suspension was added with Ca(OH)2 at 0.5% and stirred at 100 rpm for 5 min and at 50 rpm for 3 min; the pH rinsed to 12.4 and the cells were rapidly flocculated. The flock grew rapidly with addn. of FeSO4 at 0.05% and by stirring for 5 min. at 30 rpm: diam. and sp. gr. of the flock were 2-10 mm and 1.1-1.15, resp. The flock was stable against mechanical shock. It was filtered with a tetron felt filter at vauuum of 400 mm Hg; sludges contg. 60% moisure were obtained and the filtrate was completely transparency. (J49086584).

DNIN ★ D16 03176 D/03 ★J8 0049-827

Regulating culture conditions of microorganism forming hydrocarbon(s) - by regulating amt. of circulating air and amt. of starting material

DAINIPPON INK CHEM KK(JAGA) 13.04.73-JP-041430

H04 (15.12.80) C12n-01/26

13.04.73 as 041430 (5pp22)

In cultivation of microorganisms which can assimilate hydrocarbons, the amt. of air to be circulated and amt. of starting material are regulated on the basis of the pH value and space velocity of the starting material to be circulated. (J49126876).

DNIN ★ D16 03177 D/03 ★J8 0049-828

Hydrocarbon assimilating microorganism aerobic cultivation - using a bubbling tower, with liq. surface-draft tube top distance being at least four fifths of the draft tube dia.

DAINIPPON INK CHEM KK(JAGA) 13.04.73-JP-041431

H04 (15.12.80) C12n-01/26

13.04.73 as 041431 (5pp22)

The cultivation of microorganisms which can assimilate hydrocarbons uses a culture medium in aerobic conditions contg. n-paraffin and a bubbling tower equipped with a draft tube. The distance from the top of a draft tube to the liq. surface is ad at least 0.8 times as much of the dia. of the draft tube.

Effective cultivation can be attained. (J49126877).

NIPT D16 55951 A/31 = J

Bread yeast prodn. by aerobic culture on conc. beet sugar contg. molasses, nitrogen and phosphorus sources and opt promoters

NIPPON TENSAI SEITO KK 10.12.76-JP-147677

*(D11) (15.12.80) *J53072-888 + C12n-01/38 C12r-01/86*

10.12.76 as 147677 (4pp5)

Method comprises (a) adding concd. Steffen filtrate (I) to mol that the fermentable sugar in (I) is 2-40% w.r.t. that in the m (b) adding N source, P source and opt. growth factors to th and (c) using the mixt. as a culture medium for the break yea exponential supply of the medium continuously or intermitter

Bread yeast with high sugar resistance can be obtd. in hig (I) is obtd. by saturating waste from beet sugar factories wi sepg. CaCO3 ppte and concentrating the filtrate to Bx adjusting pH to 5.0. (J53072888).

BEEC D16 72840 W/44 #J8 0

Clavulanic acids and derivs. - as antibacterials and beta-lac inhibitors prepd. from streptomyces clavuligerus

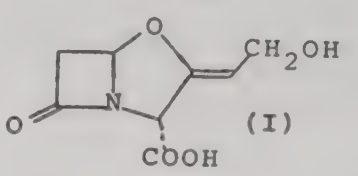
BEECHAM GROUP LTD 18.04.75-DE-517316 (20.04. 017410)

*B02 C02 (15.12.80) *DE2517-316 C07d-498/04 C12p-17/18*

19.04.75 as 040257 (+21.6.74,9.10.74-GB-027715,043651) (37pp)

Clavulanic acid of formula (I) and its salts and esters are new prepd. by cultivating Streptomyces clavuligerus esp. ATCC 27

(I) has antivacterial acticity and inhibits beta-lactama synergises the activity of penicillins and cephalosporins a beta-lactamase synthesising bacterial. It may be used in hun veterinary medicine. (J53002494).



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BEEC D16 72840 W/44 #J8 0

Clavulanic acids and derivs. - as antibacterials and beta-lacti inhibitors prepd. from streptomyces clavuligerus

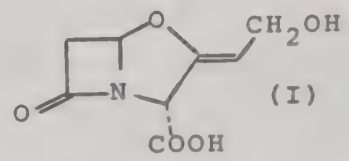
BEECHAM GROUP LTD 18.04.75-DE-517316 (20.04.7 017410)

*B02 C02 (15.12.80) *DE2517-316 C07d-498/04 C12p-17/18*

19.04.75 as 040258 /77 Div.ex. 160902/76 (+21.6.74, 9.10.7 027715,043651) (38pp)

Clavulanic acid of formula (I) and its salts and esters are new prepd. by cultivating Streptromyces clavuligerus esp. ATCC 27

(I) has antibacterial activity and inhibits beta-lactama synergises the activity of penicillins and cephalosporins a beta-lactamase synthesising bacteria. I It may be used in hum veterinary medicine. (J53002495).



(I)

BEEC D16 72840 W/44 #J8 00

Clavulanic acids and derivs. - as antibacterials and beta-lacta inhibitors prepd. from streptomyces clavuligerus

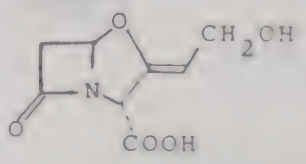
BEECHAM GROUP LTD 18.04.75-DE-517316 (20.04.7 017410)

*B02 C02 (15.12.80) *DE2517-316 C07d-498/04 C12p-17/18*

19.04.75 as 040259 /77 Div.ex.160902/76 (+21.6.74,9.10.7 027715,043651) (36pp)

Clavulanic acid of formula (I) and its salts and esters are new: prepd. by cultivating Streptomyces clavuligerus esp. ATCC 2706

(I) has antibacterial activity and inhibits beta-lactamas synergises the activity of penicillins and cephalosporins ag beta-lactamase synthesising bacteria. It may be used in huma veterinary medicine. (J53003588).



D16 72840 W/44 #J8 0049-833

nic acids and derivs. - as antibacterials and beta-lactamase rs prepd. from streptomyces clavuligerus

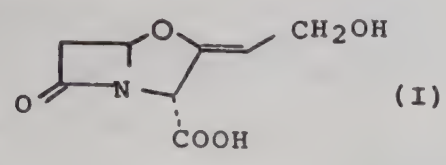
CHAM GROUP LTD 18.04.75-DE-517316 (20.04.74-GB-0)

*C02 (15.12.80) *DE2517-316 C07d-498/04 C12p-17/18*

as 040260 /77 160902/76 ex.Div. (+21.6.74,9.10.74-GB-027715, 36pp)

nic acid of formula (I) and its salts and esters are new: (I) is y cultivating Streptomyces clavuligerus esp. ATCC 27064.

s antibacterial activity and inhibits beta-lactamase so ses the activity of penicillins and cephalosporins against tamase synthesising bacteria. It may be used in human or ary medicine. (J53003589).



(I)

D16 88575 A/49 = J8 0049-836

of ribonucleic acid having low deoxyribonucleic acid content racting RNA from yeast using common salt as extractant at

YO KOKUSAKU PULP 04.04.77-JP-037537

*(D13) (15.12.80) *J53124-690 C07h-21 + C12p-19/34*

as 037537 (3pp5)

acting RNA from yeast using common salt as the extracting t pH 4-5, RNA having a DNA content of 0-2% can be readily or use as seasoning or material for medicines.

fically, aq. yeast cream having yeast concn. 4-20% is prepd. mmon salt 2-10% is added to the cream. The mixture is then ed at 80-100 deg.C for 30-200 min. at pH 4-5. The pH at the extn. rtant and at pH 5-7 the obtd. RNA has DNA content 3-7%. 690).

D16 41308 B/22 = J8 0049-837

cleic acid prodn. - by culturing yeast strain candida tropicalis ref. using molasses as carbon source

NIPPON INK CHEM KK 27.09.77-JP-115175

*C03 E11 (D13) (15.12.80) *J54049-395 + C12n-01/16 C12p-19/34 -01/74*

as 115175 (5pp69)

produced by culturing novel yeast strain candida tropicalis fungi of high content of ribonucleic acid in fungi body and ing ribonucleic acid from the cultured fungi body. Pref. the is carried out at among 27-33 deg.C, esp. at 30 deg.C, and at .0.

is useful as material for seasoning 5'-nucleotide, material for aceuticals or agricultural chemicals. The yeast strain having NA content and crude protein content is found from soil at s of Kasugabe City Saitama prefecture. (J54049395).

D16 44950 B/24 = J8 0049-838

odn. by cultivation of Candida tropicalis - followed by extn. . soln. of sodium chloride at specified pH and temp.

NIPPON INK CHEM KK 06.10.77-JP-119483

*(15.12.80) *J54055-791 + C12p-19/34 C12r-01/74*

as 119483 (4pp16)

of RNA comprises extracting Candida tropicalis C-1151 -P 4173) with an aq. soln. of NaCl adjusted to pH 7.0-8.0 under at 70-80 deg. C.

ultivation of Candida tropicalis C-1151 is carried out for 7-14 a nutrient medium contg. molasses (equiv. to 1-8% glucose), d ammonium phosphate at a CNP ratio of 100:5:1 to 100:20:5. ast is suspended in water at a ratio of 8-10%, 3-7% NaCl is adjusted to pH 7-8 with NaOH and the mixt. is stirred at 70-80 or 30-200 minutes. After removal of the cells, the extract is with CaCl2 and hydrochloric acid to ppte. crude RNA. 791).

D16 78090 Y/44 = J8 0049-839

tic prodn. by culturing Streptomyces aerobically - in medium sing an aq. extract of a protein mixt. contg. soybean flour, n protein, gluten, water, maltose and sodium chloride

ABE SEIYAKU KK 29.03.74-JP-036057

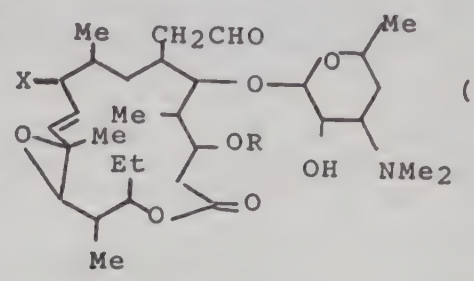
*(15.12.80) *J50126-880 + A61k-31/71 C07h-17/08 C12p-19/62 -01/46*

as 036057 (13pp38)

ibiotic (I) (I; X is OH, H) (II; X is O, R is H) (R is H, acetyl, or yl) is produced from (II) by reacting it with Streptomyces cell prepns.

example, S. platensis marubinus MCRL-0939 was cultured ally at 27 deg.C for 72 hrs. in a medium contg. an aq. extract tein mixt. contg. 30 g soybean flour prod. 10 g soybean protein g gluten, 300 ml water, 20 g maltose, 40 g NaCl, and water to a ol. of 1 litre. The cells were collected, washed with physiological siline, and suspended in physiological saline (12 g/125 ml). The cell suspension (500 ml) was added to 1 litre of a mixt. contg. 20 mg/l glucose and 10 mg/l isoleucine. The cell suspension mixt. (75 ml) was added to 25 ml of a soln. contg. 1000 micro g (II)/ml.

Mixt. was incubated at 27 deg. for 35 min. with shaking and then centrifuged. The supernant soln. was worked up to obtain 139 mg mixt. of the antibiotics M-2846 (I;R is acetyl)) and M-2847 (I; R is propionyl) 23 mg of the antibiotics M-2847 23, 14 mg M-2846 and 108 mg M-2845 (I; R is H). (J50126880).



(I)

BANY D16 74133 B/41 = J8 0049-840

Cephapirin prepn. - by reacting 4-pyridine:thioacetic acid (deriv.) with 7-ACA in presence of Arthrobacter culture

BANYU PHARM CO LTD 14.02.78-JP-014933

*B02 (15.12.80) *J54110-394 + C12p-35/04 C12r-01/06*

14.02.78 014933 (4pp)

Prepn. of cephpirin comprises reacting 4-pyrdinethioacetic acid or its active deriv. (e.g. methyl ester, 4-pyridylthioacetamide, etc.) with 7-aminocephalosporanic acid aq. medium in the presence of a culture or a treated culture of a strain belonging to genus Arthrobacter (e.g. viscosous sp.nov. ATCC 15294).

Pref. the acylating enzyme produced by the strain is adsorbed on a carrier. 7-ACA is generally used in the form of free acid at a concn. of 5-50 mg/ml., pref. 15-30mg/ml. The 4-pyridylthioacetyl gp. -donor is used in amt. 1-20 mol. pref 2-5 mol. per mol. 7-ACA. The reaction is performed at 30-45 deg. C., pref. 35-40 deg. C at pH 6.5-8, pref. 6.7-7.2, for 1-5 hrs.

The produced cephapirin is pref. isolated under mild conditions, e.g. the reaction mixt. filtrate is adjusted to pH 2-2.2 with 2N phosphoric acid under cooling, passed through styrene type porous resin, washed with cool water and eluted with 60% hydrous methanol. The cephapirin active fractions combined are then adjusted to a pH of 3-3.2 and cooled to ppte. cephapirin.*** FR2452098 BJSP3 2452098B

FRNG D16 64839 B/36 = J8 0049-899

Ultrafiltration circuit with recirculation - having two ultrafilter modules mounted in vertical leg with liq. head of 0.5 to 1.5 times pressure drop in module

FRINGS H F A 24.02.78-DE-808022

*J01 (15.12.80) *DE2808-022 B01d-31*

23.02.79 as 019879 (10pp1053)

Continuous ultrafiltration of a liq. involves the use of a circulation vessel in which the liq. level is kept automatically controlled. From this vessel liq. is recirculated round at least 1 circuits, each of which contains at least 2 filter modules. Filtrate from these collects in a vessel at the base of the main vessel.

The recirculation circuits have low pressure drop. In them are located at least 2 modules mounted vertically in series with flow from top to bottom. The vertical distance between them is equivalent to 0.5 to 1.5 times the pressure drop across them. (J54128986).

MERI D16 40012 F/00 = J8 0050-008

Myxovirus vaccine purification

MERCK & CO INC 02.04.68-US-718190

*B04 (16.12.80) *BE-730-802*

SEKI D16 87528 X/47 = J8 0050-475

Decomposition of urea acetaldehyde condensates - using bacteria of Aspergillus or Penicillum gp. or enzymes therfrom

SEKISUI CHEMI IND KK 28.03.75-JP-038265

*A35 C04 (A21) (18.12.80) *J51112-478 + C02f-03/34 C12r-01/66*

28.03.75 as 038265 (7pp)

A urea-acetaldehyde condensate is decomposed with bacteria of Aspergillus or Penicillium group or enzyme produced from the bacteria. The bacteria or enzyme can easily decompose the condensate, and can be used in treatment of the waste condensate. When the bacteria or enzyme is used with nitrogen type fertiliser in soil, an ammonia system fertiliser can be produced. (J51112478).

TAKG D16 69900 Y/39 = J8 0050-476

Bacterial treatment of acrylamide - using Bacillus and Pseudomonas bacteria

TAKI CHEMICAL KK 16.02.76-JP-016191

*A14 E16 (A35 A41 D15) (18.12.80) *J52099-281 C12r-01/07 + C02f-03/34*

16.02.76 as 016191 (6pp5)

Process comprises treating acrylamide using bacteria belonging to Bacillus and Pseudomonas together. Specifically Bacillus brevis ATCC 8185, B. circulans ATCC 9966, B. megaterium IAM 1166, B. sphaericus IAM 1286, Psuedomonas putrefaciens ATCC 8071, P. aeruginosa ATCC 12045, P. ovalis IFO 1205 and P. diminuta ATCC 11568, are cultured in liq. medium at 25-35 deg.C at pH 6.5-9.0 either separately or in admixture.

For treating waste water contg. acrylamide monomer, the culture is introduced in the tank for the activated sludge method. Method can be also used for removing acrylamide monomer from acrylamide polymer, and the acrylamide polymer free of acrylamide monomer obtd. is partic. useful as flocculant for water treatment. (J52099281).

TAKG D16 71839 Y/40 = J8 0050-477
Waste water acrylamide monomer removal - by treating with bacterial biomass contg. Brevibacterium, Bacillus and Pseudomonas strains

TAKI CHEMICAL KK 24.02.76-JP-020419
*A14 E16 (A35 A41 D15) (18.12.80) *J52102-489 C12r-01/07 + C02f-03/34*

24.02.76 as 020419 (6pp5)

Acrylamide monomer can be decomposed by applying bacterial strains of Brevibacterium, Bacillus and Pseudomonas. Polyacrylamide is used as the flocculant for water. Acrylamide monomer contg. the waste water from factories using acrylamide monomer is detoxicated by treatment with (1) Bacillus brevis IAM.1031, (2) B. megaterium IAM.1166, (3) b. polymyxa IAM.1210, (4) B. sphaericus ATCC.10208, (5) Brevibacterium ammoniagenes IAM.1641, (6) B. ammoniagenes ATCC.6872, (7) B. acetylicum ATCC.953, (8) B. vitarumen ATCC.10234, (9) Pseudomonas aeruginosa ATCC.12045, (10) P. putrefaciens ATCC.8071, (11) P. taetrolens IAM.1653, and (12) P. ovalis IFO.12051.

Other living bacterial mass and its crushed prod. can be also applied. These bacteria are cultured on large scale in suitable culture medium at 20-35 deg.C at pH 6.5-9.0. In the case of treating waste water thus cultured bacterial mass is added in the tanks for activated sludge to three individual tanks. (J52102489).

ALMI = ★ D16 03259 D/03 ★SU-732-377
Microbiological prodn. of lysine and glutamic acid - includes addn. of wheat bran extract as biosynthesis stimulating agent to increase yield

AS LATV MICROBIOLOG 01.03.77-SU-457513
B05 E16 (05.05.80) C12b-03/14 C12d-13/06

01.03.77 as 457513 (3pp938)

L-lysine- and L-glutamic acid-producing microorganisms are cultured in a nutrient contg. addn. of wheat bran extract as biostimulant.The extract contains(in %):reducing cpds. 11-78; nitrogen 11-17; potassium 3.6; phosphorus 0.7; aminoacids 0.6-1.7; thiamine 400-1500 mg % and biotin 20-50 mg %.

Brevibacterium and Micrococcus type bacterial producers can be cultured in a nutrient contg. sugar as C source and ammonium sulphate or used as N source at pH 6.8-6.9. The addn. of wheat bran extract accelerates the biosynthesis of above cpds. by 20% and increases the yield of final prods. by 29-68%. Bul.17/5.5.80.

PETU/ ★ D16 03261 D/03 ★SU-732-379
Microbiological prodn. of itaconic acid - using aq. nutrient contg. sugar, corn extract, salts and technical glycocoll, useful as intermediate

PETUKHOV A G 26.12.77-SU-560084
C03 E17 (05.05.80) C12d-01/02

26.12.77 as 560084 (5pp938)

Itaconic acid is useful in mfr. of detergents,ion-exchangers, dyes, insecticides etc. The microbiological prodn. of itaconic acid includes cultivation of producer strain contg. sugar, corn extract, mineral salts and additives. The final prod is sepd. by evapn. of the fermentation soln., followed by filtration, crystallisation and drying the crystals.

The yield of the final prod. is increased and the residual sugar content in the fermentation medium is decreased, with simplification of the sepn. procedure, by addn. of technical grade glycocoll to the nutrient in amts. of 50-75% (based on total sugar content).The nutrient is then acidified with mineral acid to pH 2.0-2.3 and sterilised before use.

Typical aq. nutrient contg.(in g/l):sugar 35; glycocoll 35; ammonium nitrate 2-5; corn extract 0.2; zinc sulphate 0.0044 and monopotassium phosphate 0.001 is used for culturing Aspergillus terreus fungal strain at 35-37 deg. C for 13-15 days for max. prod. yield.Bul.17/5.5.80.

KUBA = ★ D16 03262 D/03 ★SU-732-380
Fractional sepn. of bacterial nucleic acids - includes two/stage hydrolysis of nucleotide contg. liquid phase, useful in biochemical research

KUBAN MEDICINE INST 18.04.75-SU-125187
B04 (08.05.80) C12d-13/06

18.04.75 as 125187 (3pp938)

Fractionation of bacterial nucleic acid, useful for accurate d of desoxyribonucleic acid(I) and ribonucleic acid(II) co bacteria, includes removal of free nucleotides and lipi bacterial cells alkaline hydrolysis of cells and cellular rib acid, pptn. of (I) and proteins from hydrolysate and sepn. from ribonucleotide-contg. liquid phase.

More accurate and improved sepn. of nucleic acids is ach part of liquidliquid phase is treated with ethanol to ppte (I) residue is hydrolysed with acid, followed by quantitative dete total cellular (I) content. The remainder of liquid phase is hyd also, and the ribonucleic acid content is est quantitatively.The method, can be used to separate m (I)(88%)(18-62% for known method). Bul.17/5.5.80.

MOFO = ★ D16 03263 D/03 ★SU-
Microbiological prodn. of glucose-isomerase - using Actino albogriseolus 28-3 microbial strain as high activity high enzyme producer

MOSC FOOD IND TECH(ASMI=) 13.04.77-SU-477281
(D17) (08.05.80) C12d-13/10

13.04.77 as 477281 (3pp938)

Microbiological prodn. of glucose-isomerase enzyme in cultivation of Actinomyces albogriseolus 28-3(BKM A-588) mic strain in nutrient medium contg.(in %): D-Xylose 1.0; peptor yeast extract 1.0; dipotassium hydrogen phosphate 0.3; magn sulphate heptahydrate 0.1 and agar(Difco)0.1. The inoculant is by culturing above strain on xylose-starch agar contg. pe yeast extract and Mg and Co salts.

After two-stage culturing with stirring the biomass is sepd cells are fragmented and the liquid phase is used as enzymic p The above producer strain gives high activity glucose-isomer high yield and at low cost.Bul.17/5.5.80.

MOSU ★ D16 03264 D/03 ★SU-7
Microbiological prodn. of proteolytic enzyme - by culturing ba thuringiensis in nutrient contg. glycerol and sodium citrate

MOSCOW LOMONOSOV UNIV 11.07.77-SU-508436
B04 (07.05.80) C07g-07/02 C12d-13/10

11.07.77 as 508436 (3pp938)

Purified proteolytic enzyme, useful in medicine is prepd. by ae culturing of Bacillus thuringiensis var. finitimus bacterial producer in aq. nutrient contg. glycerol mineral salts and so citrate at 28-32 deg. C for 36-48 hrs.After sepn. of bacterial cell culture medium is treated with ammonium sulphate to 0 saturation, followed by dialysis and freeze-drying of the final pr

The nutrient for submerged culturing contains(in wt.%):gly 0.5-1.5;magnesium sulphate heptahydrate 0.01-0.05;manga sulphate pentahydrate 0.003-0.008; calcium chloride 0.005-0.01; sulphate septahydrate 0.0003-0.0007; copper sulphate pentahy 0.0003-0.0007; ferrous sulphate septahydrate 0.00002-0.0 dipotassium phosphate 0.03-0.07; ammonium sulphate 0.1-0.3 sodium citrate 0.1-0.3 and water the rest. Bul.17/5.5.80.

BIOT = ★ D16 03265 D/03 ★SU-73
Microbial cellulase producer preservation nutrient - c fermented potatoes, agar-agar, ammonium tartrate, potassium magnesium sulphate(s) and water

BIOTECH RES INST 11.10.77-SU-534492
(06.05.80) C12d-13/10 C12k-01/06

11.10.77 as 534492 (3pp938)

Nutrient medium for preservation of microbial cellulase enz producing strains includes agar-agar and magnesium sulphate addn. of fermented potatoes, salts and water.

The preservation period of cellulase-producing trichode viride, Trichoderma lionarium etc. strains is prolonged and act of producers is stabilised if the solid culture medium contai wt.%):fermented potatoes 10-70; ammonium tartrate 2-15; potas dihydrogen sulphate 0.1-0.4; magnesium sulphate 0.1-0.4 agar-ag 3 and water the rest.Bul.17/5.5.80.

KHNO = ★ D16 03266 D/03 ★SU-73
Brewing equipment etc. microbial contamination st identification - by agglutination reaction with specific serum selective culturing

KHARK NON ALCO BEER 12.12.77-SU-553728
(07.05.80) C12k-01

12.12.77 as 553728 (3pp938)

Microorganismswhich contaminatebrewing equipment and can be identified by selective culturing, sepn. of microbial bio from culture medium by centrifugation, washing cells with 0 sodium chloride soln. and diluting the biomass to obtain suspe contg. 1-2 billions cells per 1 ml.The microbial cells are ident byagglutinationreaction using immune serum obtd. immunisati animal with the same type cells.

The serum prior to use is inactivated at 56-60 deg. C for 40-45 m and globulin fraction is pptd. with ammonium sulphate. The se is then diluted with 0.85% table salt soln. and added to suspension. Agglutination of cells produces position identificatio

ethod can be used in food preservation wine-making, yeast Bul.17/5.5.80.

★ D16 03267 D/03 ★SU-732-387
illus pentoaceticum V-B-23 strain - used as high yield lactic c acids producer
ZA MICROBIOL 03.04.78-SU-612869
(06.05.80) C12d-01/02 C12k-01/02
s 612869 (4pp938)
ora bacterial strain producing lactic acid and acetic acid on grade vegetable material hydrolysate contg. pentose ef. straw or wild cane primary hydrolysis prods.) comprises cterium pentoaceticum V(b)-23 strain. The strain is d as new.
rain can accumulate up to 2.5-3.0% organic acid in pentose ntg. nutrient medium. It increases the productivity of nen the latter is cultured together with the above strain) by Bul.17/5.5.80.

★ D16 03268 D/03 ★SU-732-388
guilliermondii VSB-744 strain - utilises petroleum paraffinic rbon fraction as nutrient carbon source, and used in protein concentrate mfr.
TEIN BIOSYNTHESI 23.02.77-SU-456298
(08.05.80) C12c-11/08 C12k-03
as 456298 (3pp938)
al strain Candida guilliermondii VSB-744 utilises petroleum rbons or carbon source. This yeast strain is described as an be used in microbial biomass prodn. for use as protein-source by a continuous process at 28-38 deg. C and nutrient 0 at 0.1-0.5 vol per hr flow rate.
al nutrient medium contains petroleum paraffins and salts(potassium chloride,manganese sulphate, ferrous , magnesium sulphate, zinc sulphate, ammonium sulphate sphoric acid).Ihe medium pH is regulated by addn. of aq. a soln.Bul.17/5.5.80.

★ D16 03269 D/03 ★SU-732-389
cillus acidophilum K-1 strain - used in mfr. of dietary milk-rods. with antibacterial characteristics
RY IND RES INST 31.08.77-SU-523140
(06.05.80) A23c-09/12 C12k-03
as 523140 (4pp938)
ilic lactic flora bacterial strain Lactobacterium ilum K-1 is useful in soured milk-based food prods. mfr. The as high lactic acid and antibiotics biosynthesis rate. It can be mfr. of dietary milk based food used during the treatment of ntestinal infections as it is antagonistic to pathogenic .
inoculated with above strain has pH 4.5 after 5-6 hrs. g.The strain is resistant to the action of phenol and gives smooth texture and pleasant flavour.Bul.17/5.5.80.

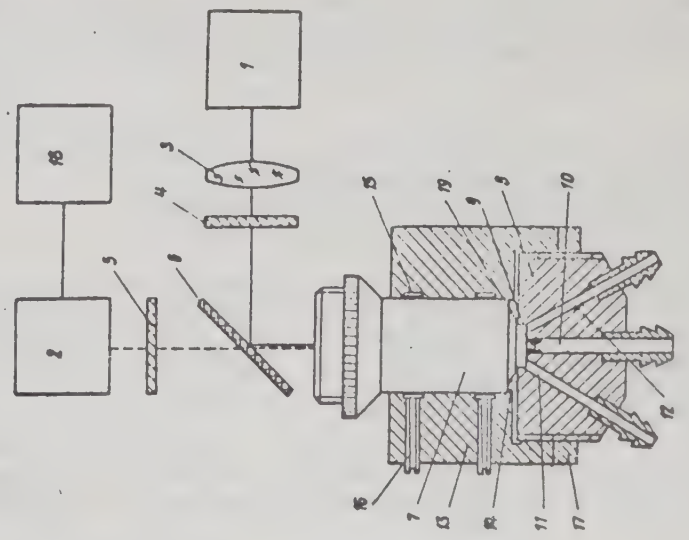
★ D16 03297 D/03 ★SU-732-743
ative determn. of protein in wine - includes pptn. of colouring and polyphenol cpds. with polyamide before colorimetric s protein determn.
IA FOOD IND CON 27.11.78-SU-689209
(08.05.80) G01n-33/14
as 689209 (2pp70)
content in a wine is determined by precipitating the s; sepg. them, dissolving effecting a colour reaction, and ining the protein content colorimetrically.
accuracy of the protein determn. is increased by narily removing from the wine(before the protein pptn.) the ng agents and polyphenolic substances by introducing a ed polyamide. The polyamide:wine weight ratio is (0.5-2.0) ter 30-90 min the liquid is filtered off.Bul.17/5.5.80.

★ D16 03317 D/03 ★SU-733-685
ucuronidase enzyme prepn. for research - by extn. of liver with acetate buffer soln., pptn. with ammonium sulphate, ith water, dialysis and freeze-drying
GA M YA 01.06.78-SU-623042
(25.05.80) A61k-37
as 623042 (2pp938)
ucuronidase enzyme is useful in biochemical and medical h. This enzyme is obtd. from fragmented animal liver tissue ogenisation witb acetate buffer soln., incubation at 37 deg.C, pptd, material after autolysis, extn. with acetate buffer and prod. with ammonium sulphate.
activity beta-glucuromidase is obtd. if the prod. is purified by ith water followed by the dialysis and freeze-drying. The increases the purity and activity of the final prod. 3-5 times. 15.5.80.

ALIZ= ★ D16 03318 D/03 ★SU-733-686
Anti-reagin immunoglobulin prodn. - includes immunisation of animal with mixed source lymphocyte fraction and purificn. of serum by immuno-sorption
AS LITH ZOOLOG PARA 10.10.77-SU-530827
B04 (25.05.80) A61k-39
10.10.77 as 530827 (2pp938)
Antireagin immunoglobulin prodn. includes the immunisation of animals followed by the sepn. of blood serum, its purificn. and sepn. of the final prod. from serum. The process is simplified and the prod. yield is increased if the animals are immunised with mixed lymphocyte fraction sepd. from lymphatic tissue of bronchial and mesenteric lymph nodes, tonsils and adenoids.
The antiserum is purified by immuno-sorption of inactivated serum with suspension of T-lymphocytes and G, A, M and D-type serum globulins. Bul.18/15.5.80.

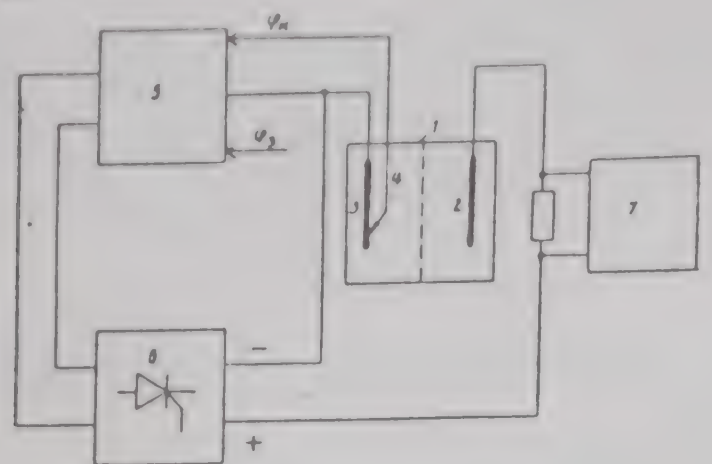
AUBI= ★ D16 03418 D/03 ★SU-734-256
Unit for culturing microbial cells - has reciprocating piston for periodic pressure variation for automatic control of respiration and nutrition
AS USSR BIOLOG EQUP 03.02.78-SU-576497
(18.05.80) C12b-01/10
03.02.78 as 576497 (3pp89)
Microbial growth rate is increased due to the improved circulation of gas and the culture medium and due to the improved removal of metabolic prods.
The unit has a controller of periodic pressure changes in the fermenter including a vertical chamber connected to the fermenter. The side of the chamber has a heater valve connected to the foam feeding pipe while inside the chamber is housed the reciprocating piston for changing pressure in the fermentation vessel.

LEAV= ★ D16 03420 D/03 ★SU-734-270
Device for fluorescent research into aq. biological samples - has an open cuvette used for micro-objective immersion and located in sealed tube holding micro objective
LENGDAVIAT INSTRUM(LEME= XRAY=) 12.01.78-SU-570716
J04 P31 (15.05.80) A61b-10 C12k-01
12.01.78 as 570716 (3pp89)
Enhanced sensitivity of fluorescent testing of biological objects in an aq. sample is achieved with a cuvette moved in the sealed tube holding the micro-objective. The tube ensures immersion of the micro-objective into the wash fluid and controls the focussing.
Focussing of the micro-objective is carried out by shifting tube along the side of base of the trough-flow cuvette. The alignment of micro-objective with the microhole of channel in the base is controlled by screws while the micro-objective is clamped on the set location by nut. The radiation is absorbed by thebiological object passing through microhole and the fluorescent beam is transmitted by dichroic mirror and filter to flurorescent detector connected to recorder. Bul. 18/15.5.80.



ASIP= ★ D16 03421 D/03 ★SU-734-276
Bacteria culture substrate electrochemical recovery controller - sets voltage between cathode and substrate by adjusting voltage between anode and cathode of electrochemical reactor
AS SIBE PHYS INST 09.08.77-SU-517080
S03 X25 (15.05.80) C12k-01/10
09.08.77 as 517080 (3pp89)
Lower labour consumption in the electrochemical recovery of substrate for bacteria cultivation, as well as enhanced process efficiency, are achieved by maintaining a constant voltage difference between cathode and the substrate medium. This is carried out by proportional adjustment of voltage between anode and cathode of the electrochemical reactor.
For a given cathode potential the rate of Fe recovery is

proportional to the concn. of ferric ion, while the rate of bacterial oxidn. of Fe depends on concn. of the cells. The anode space in the reactor is sepd. from the cathode space by a cation exchange membrane. The voltage is set by controller while current is adjusted by thyristor rectifier and the changes are plotted by a recorder. Bul. 18/15.5.80.



SAIN/ ★ D16 03485 D/03 ★US 4241-536
In vitro tumour and embryo formation in plant seedlings - by treatment with hormones under controlled environmental conditions
SAINT-FIRMIN A R 19.11.76-GB-048403 (10.11.76-GB-046866)
B04 C03 P13 (30.12.80) A01g-31 C12k-09
07.07.78 as 922681 (+9.11.77(2)-US-849952/3) (12pp1251)
A tumour is induced in vitro by treating the growing point of a seedling with a first hormone with auxin activity, and then with a second, different hormone of the same type. Embryogenesis can then be induced in the resulting mitotic cells by treating in a nutrient medium under controlled conditions, i.e. 12-27 deg.C and light intensity (up to 730 nm) of 2000-400000 ergs per sq.cm. per sec., for selected photoperiods.

When the differentiated cells have reached the embryo stage, one or more of the environmental factors can be modified to induce prodn. of metabolites or changes in metabolite patterns. Also new are cinnamic derivs. (A) produced together with steroids by Hyoscyamus and Duboisia material differentiated by this method. Undifferentiated plant cells can be differentiated (a) by incubation with (A) or embryonic cells synthesising it, or (b) by incubation with differentiated cells of another species.

The process can be used to produce any metabolite made by the whole plant e.g. tropane alkaloids, ansa-macrolides, steroids or proteins, and to induce symbiotic relationships between higher plants and fungi for prodn. of antineoplastic agents. (A) is a growth regulator, antibacterial, mitosis regulator and possibly an antineoplastic agent. Normal, healthy plants can be raised from single embryonic cells and the metabolite content of the embryos may be higher than that of the mature, whole plant.

MINN ★ D16 03540 D/03 ★US 4242-096
Competitive binding immunoassay for antigens - using antigen immobilised on piezoelectric oscillator
MINNESOTA MINING CO 14.11.77-US-851491
A96 B04 S03 (S05) (30.12.80) G01n-33/16
14.11.77 as 851491 (8pp367)
Immunoassay of an antigen (I) in a liq. sample, pref. biological fluid like urine or serum is carried out by contacting the sample simultaneously with (a) a predetermined amt. of anti-(I) antibody and (b) (I) immobilised in biologically active form on a piezoelectric oscillator. After reaction, the oscillator is removed and the change in its frequency is measured.

The method avoids the use of labelled antigens and immobilised antibodies while achieving sensitivities as low as 10 to the power minus 11 mole/l (comparable to radioimmunoassay for small mols.).

INMR D16 00267 B/01 =US 4242-270
Bacterial esp. Bordetella pertussis endotoxin fractionation - to give fractions with non-specific immunological adjuvant activity
INST MERIEUX 31.05.77-FR-016473
*B04 (30.12.80) *DE2823-750 + C09f-05/10 C11b-01/10*
0..1..7 as 094812 (+29.3.78-US-891412) (+24.11.77, 23.2.78-CH-014404, 001974) (15pp1251)

30.05.78 as 910895 (-pp)
The lipid fractions constituting a bacterial endotoxin such as Bordetella Pertussis endotoxin, are sepd. by (a) under mild conditions, hydrolysing the endotoxin with an organic acid at a pH 2-4 to produce a mixt. of a supernatant and a residue; (b) sepg. the supernatant from the residue and lyophilising the residue to yie prod. (A); (c) extracting prod. A with 1:1 toluene/methanol mixt. which results in a supernatant contg. an extract prod. (X) and insol. residue (B), and (d) extracting prod with a solvent different from the solvent m used in step (c) which results in a superna and an insol. residue.

ELEC- ★ D16 03636 D/03 ★US
Immunoassay using bifunctional immuno-adsorbent - con antigen and antibody sites
ELECTRO-NUCLEONICS 07.06.78-US-913508
B04 S03 (S05) (30.12.80) A61k-39 A61k-43 G01n-33/16
07.06.78 as 913508 (6pp367)
A bifunctional immunoadsorbent (BIA) and a method for de the presence of an antigen or antibody in serum are claim BIA contains antigen (Ag) and complementary (anti-Ag) a bound at separate sites. The method comprises (a) incubat serum with the BIA, (b) incubating the BIA with labelled anti antibody, and (c) measuring the amt. of tracer bound to the BI

The method allows antigen to be detected in the presence of amts. of antibody, and vice versa. Since the labelled reagent either antigen or antibody, the need to isolate pure antig labelling can be avoided by using readily purified antibody ins

CHUS D16 03824 C/03 =US 4
Product with anticancer activity - derived from cells of haem Streptococcus bacterium
CHUGAI SEIYAKU KK 29.06.78-JP-078039
*B04 (30.12.80) *DE2926-406 A61k-35/74*
18.06.79 as 049744 (+31.3.77-US-783270) (7pp982)
An antitumour substance (I) is a white to grayish white p which is insol, in water, contains 42.97%C, 5.64%H and 7.31% has specified UV absorption and IR absorption spectra (I) h chemical compsn. of 33.3% rhamnose, 12.7% hexosamine, protein, 0.2% total lipid, 0% DNA and 0% RNA.

(I) is prepd. by disrupting cells of haemolytic strept bacteria, extracting a water-insol. substance from the dis cells and digesting the substance with at least one protease.

(I) is heat stable and has low inflaming and pain-ind properties and low pyrogenic activity.

MEIJ D16 35076 C/20 =US 42
Microbiologically produced antibiotic SF-2052 - with broad-spe antibacterial activity
MEIJI SEIKA KAISHA 06.11.78-JP-135921
*B03 (30.12.80) *DE2944-143 A61k-35*
31.10.79 as 089924 (11pp954)
Antibiotic SF-2052 (I) produced by cultivation of the microorg Dactylosporangium suzakiense SF-2052, (FERM-P 4670, ATCC and its acid addn. salts are claimed.

(I) as a HCl salt has an elemental analysis of 35.69% C, 7.0 11.8% N, and is a colourless amorphous powder and is stable neutral to acidic pH conditions. Spectral properties of (I). HC also claimed. (I) itself is a water-sol. basic cpd. having antibac activity.

BIOR- D16 43674 C/25 =US 42
Quick esp. coli-form bacteria determination in liq. - by gener enzyme reacting with fluorescing conjugate releasing fluore material
BIO RESEARCH 29.11.78-US-964622
*(D15) (30.12.80) *DE2947-890 C12q-01/06*
29.11.78 as 964622 (5pp931)
Bacteria present in a liq.sample are rapidly detected and quant by admixing them with an enzyme-producing agent, such tha bacterial enzyme prepd. may react with a fluorescent conju ingested by the bacteria on its release.

The liq. sample is then admixed with the conjugate, and insol microdroplets of the sample are formed by encapsulating them an oil base liq. membrane in a liq. carrier. The liq. carrier is formed into a stream such that the encapsulated microdro contg. the released fluorescent matter align themselves.

The stream produced is then moved relative to a detector fo fluorescent matter in the droplets and for the bacteria present total fluorescence is then measured and the bacterial con determined. Coliform bacteria are esp. detected by the me which uses fluorescein-di-(beta-D-galactopyranoside) as conjugate.

BROW/ ★ D16 03677 D/03 ★US 424
Sulphur di:oxide removal from stack gas - by scrubbing regenerating the scrubbing soln. microbiologically
BROWN R S 12.04.79-US-029272
E36 J01 (30.12.80) C10g-32 C12p-03 C12p-39
12.04.79 as 029272 (6pp367)

al of SO2 from stack gases produced by burning fossil fuels is out by (a) scrubbing the gas with a soln. contg. a reagent (I) eacts with SO2 to form a reducible inorganic non-gaseous S treating the loaded scrubbing soln. with a sulphur-reducing ganism (II) to form H2S and regenerate (I), (c) treating the tg. soln. with a sulphur-oxidising microorganism (III) to H2S to S, and (d) removing the S and recycling the soln. to

process allows highly soluble, non-scale-forming reagents gCO3) to be used for scrubbing, thus avoiding process control ns associated with the use of CaCO3.

D16 29215 Y/17 #US 4242-449

hoxy cephalosporins fermentative prodn. - using myces species in a thiol contg. medium, and opt. oxidative ation of side chain

MANOUCHI PHARM KK 26.07.76-JP-088770 (27.12.76-US-07)

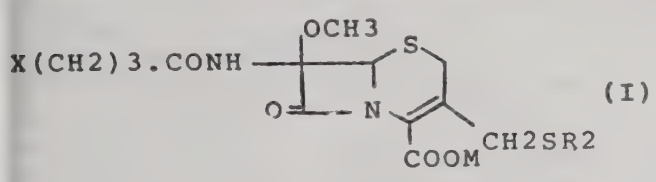
*(30.12.80) *BE-849-763 + C12p-35/08*

8 as 879786 (46pp974)

rboxybutyramido)-7-methoxycephalo-sporin derivs. of a (I: where X is -COOH) are produced by cultivating a 7-xycephalosporin-producing streptomyces in a culture m contg. nutrients and a thiol, R2SH, or its salts or precursors (I: where X is CH(NH2)COOH) and then contacting (II) with ycelium of the D-amine acid oxidising enzyme producing opsis variables, its cell-free extract or its activated mycelium aerobic conditions.

is 5-carboxymethylthio-1,3,4-thiadiazol-2-yl; 1-methyl-1H-l-5-yl; 5-methyl-1,3,4-thiadiazol-2-yl or 1,3,4-thiadiazol-2-yl. M alkali metal, alkaline earth metal, heavy metal or base-g quat. or amine salt.

s. have excellent antimicrobial activity.



(I)

D16 23150 C/13 = US 4242-450

e hydrolysis of sugars, proteins - in reactor with enzymes bilised in cells through which substrate is circulated

DW BRAND MILK PRODUCTS 06.09.78-JP-109260

*12.80) *NL7906-618 C12m-01/40 C12p-01*

9 as 065439 (3pp931)

zyme hydrolysable substrate in a constant-temp. aq.soln. the enzyme is hydrolysed by jet-dispersing it through an and a net, and reacting them with a rotating immobilised e under hydrolysable conditions.

. the size of the net is 50-80 meshes, and the reaction system is ated and cooled. The amt. of substrate used is 15-30 pts.wt. per of enzyme.

reaction occurs in a constant-temp. tank which contains the ate, a rotary column contg. the orifices, reaction container, net for uniformly dispersing the jetted soln. through the s into the column on the outer periphery of the column. s and proteins are esp. hydrolysed by the process.

★ D16 03678 D/03 ★US 4242-451

bilisation of glucose isomerase cell material - by treatment of iated homogenate of Actinoplanes spp. with a smectite filler

HEUSER BUSCH INC 25.10.79-US-088013 (12.12.77-US-859294)

7) (30.12.80) C12n-11/14 C12p-19/24

9 as 088013 (5pp478)

se isomerase (I) cell material obtd. from whole microbial cells rganism of the genus Actinoplanes is immobilised as follows: portion of the whole microbial cells of the organism is ted; (b) the disrupted (I) cell material is flocculated; (c) an bsorbing smectite filler (II) is added to the flocculated (I) cell ial; and (d) the mixt. of (I) cell material and (II) is formed into te particles.

g (II) to dewater a flocculated homogenate of (I) cell material and effectively affords an immobilised (I). (I) is useful for the sion of glucose to fructose.

D16 81190 B/45 = US 4242-452

amoyl-D-thienyl:glycine prepn. - by selective enzymic ysis of 5-thienyl hydantoin

NEGAFUCHI KAGAKU 15.03.78-JP-030062

*(30.12.80) *GB2019-835 C12p-17*

9 as 018876 (5pp931)

amoyl-D-(2-thienyl- or 3-thienyl)glycine is prepd. by treating ienyl- or 3-thienyl)hydantoin with enzymes in the form of a ed broth contg. microorganisms or their sepd. cells, in an dium.

enzyme used can hydrolyse 5-(2-thienyl- or 3-thienyl) toin to produce only the D-form of the prod., which may be recovered from the medium. Pref. the pH of the medium is maintained at 7-10, and the microorganisms used are of the genus e.g. Aerobacter, Agrobacterium, Bacillus.

Good yields of the prod. are prepd. Prod. is used as an available intermediate in the prepn. of semi-synthetic penicillins and cephalosporins.

ZAID D16 42260 A/24 = US 4242-453

Esterastine, an esterase inhibitor from Streptomyces - useful as immunosuppressant and antiinflammatory

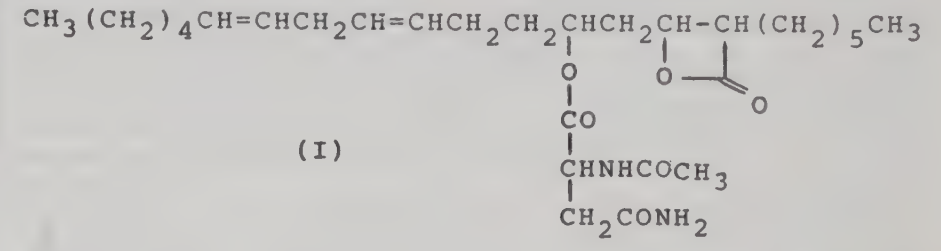
ZH BISEIBUTSU KAGAKU KEN 08.02.77-JP-012119

*B03 (30.12.80) *BE-863-771 C12p-17/02*

14.05.79 as 039094 Div.ex.4189438 (+ 30.1.78-US-873350) (8pp931)

Esterastin has formula (I), and is produced by cultivating a strain of Streptomyces lavendulae (ATCC 31336) under submerged aerobic conditions for a sufficient time in a nutrient medium contg. assimilable carbon and nitrogen sources. Pref. the microorganism is cultivated at 27-37 deg.C (esp. 25-35 deg.C) for 2-4 days under aerobic conditions.

The prod. inhibits esterase activity and is used as an immunosuppressive drug in the treatment of e.g. allergic dermatitis, systemic lupus erythematosus or haemolytic anaemia, and in the surgical transplantation operations of internal organs.



(I)

NADI ★ D16 03679 D/03 ★US 4242-454

Continuous prepn. of ethanol - from fermentable sugars, by fermentation with at least two yeast strains

NATIONAL DISTILLERS CORP 29.05.79-US-043190

(30.12.80) C12p-07/14

29.05.79 as 043190 (5pp478)

EtOH is produced by continuous fermentation as follows: an aq. soln. of a fermentable sugar (I) is fermented in a series of vessels in which the EtOH content of the medium is progressively increased in each vessel as (I) is consumed. The fermentation uses at least 2 different strains of EtOH-producing yeast: (a) one of which provides a high rate of EtOH prodn. in a medium contg. relatively low EtOH concns. and high (I) concs.; and (b) another of which provides a high rate of EtOH prodn. when the medium contains relatively high EtOH concns. and low (I) concns.

Rapid, continuous process affords industrial EtOH, from (I) sources such as that derived from the hydrolysis of manioc root starch, at competative prices.

NADI ★ D16 03680 D/03 ★US 4242-455

Continuous fermentation of sugars to ethanol - using sugars prepd. by acid hydrolysis of carbohydrate polymers

NATIONAL DISTILLERS CORP 25.06.79-US-052038

(30.12.80) C12p-07/14

25.06.79 as 052038 (9pp478)

Prepn. of EtOH by acid hydrolysis of carbohydrate polymer (I) and the continuous fermentation of the produced fermentable sugars (II) requires (a) a pressurised acidified aq. slurry of (I) particles to be uniformly mixed with high pressure steam; (b) the acidified (I) slurry is passed through a conduit under steady state temp./pressure so that at least 60% by wt. of (I) is converted to (II) (but no non-fermentable prods.); (c) the pressure of the slurry is reduced to a level at which undesirable reactions of the produced (II) cannot occur; and (d) (II) (pH adjusted; partial hydrolysate opt. further saccharified) is then fermented in a series of vessels in which the EtOH concn. of the medium is progressively increased in each vessel as (II) is consumed.

The fermentation uses at least 2 different strains of EtOH - producing yeast: (i) one which provides a high rate of EtOH prodn. in a medium contg. low EtOH concns. and high (II) concns.; and (ii) one which provides a high rate of EtOH prodn. in a medium contg. high EtOH concns. and low (II) concns.

The acid hydrolysis of (I) is effected at rapid and high conversion levels without significant degradation of the produced (II). In addn., the thermally efficient, rapid, continuous fermentation affords industrial EtOH at competitive prices.

MERI ★ D16 03681 D/03 ★US 4242-457

Automatic virus cell harvesting from growth tank - and storage at liquid nitrogen temperature

MERCK & CO INC 21.02.79-US-013494 (02.06.77-US-802846)

B04 (30.12.80) C12n-07

21.02.79 as 013494 (4pp295)

Virus cells are replicated on a prepd. surface within a growth tank supplied with a growth medium. Periodically the cells are harvested by removing the majority of the medium and transferring it to a

storage vessel and maintained at liquid nitrogen temp. The growth tank is then replenished with fresh growth medium and a further batch of cells is grown.

The inlet to the storage vessel is provided with an electrical heater to prevent its blockage by freezing of the harvested growth medium. Preferably the growth tank includes a level sensor which is used to control the quantity of fresh growth medium introduced.

The appts. harvests cells when the viral titre is at a max. The appts. is automatic and harvests cells at regular intervals.

TEXC ★ D16 03682 D/03 ★US 4242-458
Protein biosynthesis from methanol and ammonia - both produced from synthesis gas generated by partial oxidn. of fuel
TEXACO DEV CORP 25.10.78-US-954712
H04 (D13) (30.12.80) C12n-01/32 C12r-01/78
25.10.78 as 954712 (7pp367)
Prodn. of single-cell protein (SCP) is carried out by (a) gasifying a fuel by partial oxidn. to produce a product gas contg. CO and H2; (b) subjecting part of the product gas to catalytic shift conversion with steam to produce an H2-rich gas; (c) scrubbing the rest of the product gas from (a) to remove acid gases; (d) contacting the purified gas from (c) with a methanol-synthesis catalyst to produce MeOH; (e) rectifying air to produce N2 and O2; (f) recycling part of the O2 from (e) to step (a) as supplementary O2 supply; (g) passing the H2-rich gas from (b) and the N2 from (e) to an ammonia-synthesis reactor to produce NH3; (h) introducing the MeOH from (d), the NH3 from (g) and the rest of the O2 from (e) into a fermenter together with a nutrient soln. and an initial charge of Hansanula polymorpha DL 1 yeast to produce SCP; and (i) recycling by-product O2 and CO2 from (h) to step (a) as primary O2 supply and temp. moderator respectively.

The fuel in step (a) is (i) a liq. fuel selected from petroleum distillates or residua, naphtha, gas oil, residual fuel ol, reduced crudes, whole crudes, coal-tar oil, shale oil, coal liquefaction prods., and their mixts., (ii) a solid fuel selected from petroleum coke, coal coke, anthracite, bituminous coal and lignite, or (iii) natural gas. The process is capable of producing large amts. of SCP (e.g. 100 tonne/day from 158 tonne/day of residual oil) with practically no external supply of O2 or steam and without problems of waste disposal from the fermentor.

CHIC/ ★ D16 03683 D/03 ★US 4242-459
Cell culture device for prosthesis - with spiral semipermeable tube housed in culture compartment with minimum of dead space
CHICK W L 02.11.78-US-957303
(30.12.80) A01n-01/02
02.11.78 as 957303 (5pp295)
A cell culture device comprises a disc-like body with a circular fluid-tight cavity in it. A semipermeable tube is coiled to form spiral within the cavity. The interior of the tube forms a flow path for a biological fluid.

A culture compartment is formed between the coiled tube, the bottom wall of the cavity, and a cover plate. The coil is tightly wound so that adjacent coils touch to eliminate dead space. Also the cavity is sized so that it is just wide and high enough to accommodate the coil to further reduce dead space. The ends of the tube form an inlet and an outlet.

The device may be used as a prosthesis which can be substd. It may be adapted for use as an artificial liver.

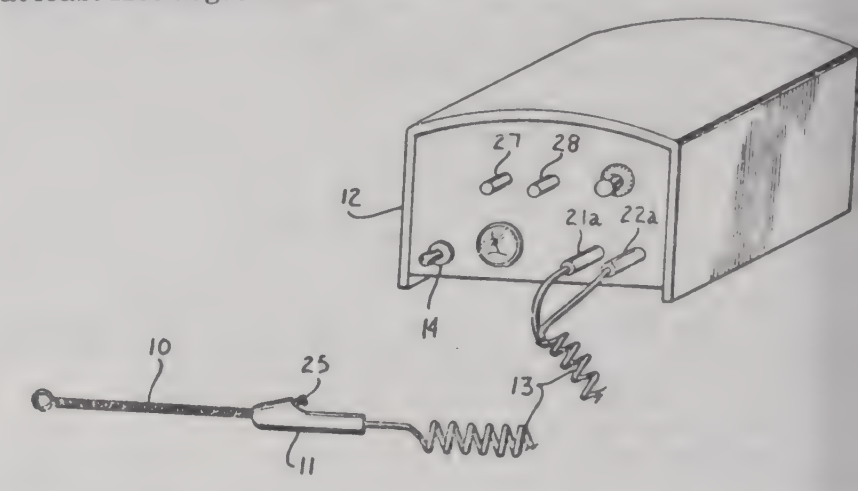
CHIC/ ★ D16 03684 D/03 ★US 4242-460
Cell culture device for prosthesis - with coiled semipermeable tube wound round spool within cylindrical housing
CHICK W L 26.12.78-US-972961
(30.12.80) C12m-03
26.12.78 as 972961 (6pp295)
A cell culture device comprises a housing with a stationary spool mounted within it. The housing and spool together define a fluid tight cavity which has a port for the introduction of cells. There is an inlet and an outlet to and from the cavity.

A semipermeable tube is wrapped about the spool along its longitudinal axis to form coils. The interior of the tube forms a flow path for biological fluid which is admitted and removed through the inlet and outlet. The tube is formed of a material which permits transport from the cavity to the biological fluid, of products produced by the cells, and transport from the fluid to the cavity of nutrients for the cells. Immunological separation between the fluid and cells is maintained.

The device may be used as a prosthesis which can be substituted for the endocrine pancreas. Alternatively it may be adapted for use as an artificial liver. Also it may be used to obtain large quantities of difficult-to-collect material produced by living cells, e.g. proteins produced by cancer cells. The device avoids clotting and has a short response time.

SNAM D16 29762 B/16 = US
Radial flow catalytic enzyme reactor for isomerisation of f uses catalytic bed of helically wound fibres contg. imm enzyme
SNAMPROGETTI SPA 13.10.77-IT-028553
*J04 (30.12.80) *BE-871-253 C12m-01/40*
12.09.78 as 941682 (5pp1376)
Reactor for enzymed catalysed reactions consists of a cyl catalytic bed which defines a chamber inside and a chamber the bed, the bed consisting of coiled fibres with occluded enzy
Soln. is supplied to one of the chambers and removed after through the bed from the other. The pitch of the fibres is 0.00 10 cm. The bed is located inside a cylindrical housing.
High output, low pressure drops and better conversion ra obtd.

THOM/ ★ D16 03685 D/03 ★US
Electrically self-sterilising inoculating loop - connectable to source and with temp. responsive circuit breaker
THOMAS R E 16.03.79-US-020999
S05 (30.12.80) C12m-01/26
16.03.79 as 020999 (6pp1358)
A loop is connectable to a power source to raise it to ste temp., with a circuit breaker responsive to loop temp. ti disco the current when sterilising temp. is reached.
The power circuit pref. includes a rheostat to vary resistanc opt. a second circuit breaker connected in parallel with different amperage value to the first to shut off power when a temp. is reached. The arrangement provides rapid and u heating. The loop is e.g. of platinum-chromium wire and will at least 1200 deg.C in 2 s.



AMCY ★ D16 03705 D/03 ★US 42
Purifying pneumococcal capsular polysaccharide - for u multivalent vaccines, by fractional pptn. with alcohol and ammonium salt
AMERICAN CYANAMID CO 08.08.79-US-064663
B04 (30.12.80) C07h-03 C08b-37
08.08.79 as 064663 (27pp1251)
Purification of immunogenic type 1 pneumococcal cap polysaccharide (A) from clarified fermentation lysate comp first fractional pptn. at 2-6 deg.C with 0.25-0.5 vol. alcohol at pH 6.7 and final sodium acetate concn. 4%. The pptd. contami are removed then (A) pptd. with 0.5-1 vol. alcohol at the sam and redissolved. The entire procedure is repeated using 0.15-0.3 alcohol in the first step and 0.5-1 vol. in the second.
The redissolved ppte. is then fractionated with cetavlo hexadecyltrimethylammonium bromide) at 21-25 deg.C an 7.4 + -0.1, using 1.5-5 vol.% of 10% (I) soln. Pptd. (A) is then pu by 3 alcohol pptn. steps, treatment with active charcoal, dialysi then freeze-drying.
Similar procedures are also claimed for purification of ty 8,12F,25,6A,6B,9N,14,19F,20,23F,3,18C,4,7F and 14 pneumoc capsular polysaccharides, the last 3 being practically free c polysaccharide.
The purified polysaccharides are used to make multiv vaccines. Efficient removal of proteins, nucleic acids an polysaccharide is achieved and the harsh chloroform-bu extraction conditions are avoided.

MITK D16 79334 B/44 = US 424
Pyruvic acid salts prodn. - by oxidising lactic acid salts with ox or air in presence of palladium or platinum catalyst (NL 10.10.79
MITSUI TOATSU CHEM INC 19.01.79-JP-003992 (17.04.78 044267)
*B05 E17 (30.12.80) *DE2915-395 C07c-59/19*
10.04.79 as 028695 (+ 31.8.78-JP-105619) (6pp974)
Pyruvic acid salts are produced by oxidising lactic acid sal room temp. to 100 deg.C. A 2-30 wt.% concn. of the salt in a solvent and an O2-contg. gas are used.
The catalyst comprises (a) at least one of Pt and Pd and (b) Pb Te, In or Bi or its halide, oxide, hydroxide, nitrate, sulph

, acetate or propionate. Pref. the catalyst is supported on C or alumina.
are used in the prodn. of e.g. L-tryptophan and L-DOPA.

See Also

D11 SU 732378 D11 SU 733624 D13 EP-22019
D17 GB 1582855 D18 EP -20472 D21 GB 2051076
D21 J8 0050006 D23 NL 165783 D25 NL 165784
D25 US 4242219

D17: SUGAR; STARCH

D17 02046 D/03 ★BE -884-954
us prodn. of modified liquid carbohydrate - by rapidly arbohydrate dispersion with steam, and reaction at lower

WRENCE TECHN 28.08.79-US-070438
80) C08b C13p
s 884954 (28pp510)
ious process for producing a modified, liquid carbohydrate s (a) feeding a carbohydrate dispersion into a tubular, pre-heating zone, and heating the dispersion by nos. steam surrounding at least part of the pre-heating zone, rt the dispersion through a gel stage into a liquid with temp. 125 deg.C, (b) immediately compressing the hot liquid a constricting orifice into a tubular, confined, reaction zone, udden fall in pressure, rendering the carbohydrate highly , (c) passing the reactive carbohydrate and a reactant usly through the reaction zone, to form a liquid modified drate. In stage (a), the temp. of the steam and the section of e-heating zone are so chosen as to ensure rapid transfer of to reduce to a min. the length of the high viscosity gel zone. quality starch syrups with dextrose equiv. of 73 can be d in less than 150 seconds.

D17 02124 D/03 ★DE 2925-283
d two-step carbonation in sugar mfr. - by recycle of off-gas ond to first carbonation step
DEUTSCHE ZUCKER 22.06.79-DE-925283
.81) C13d-03
as 925283 (8pp367)
tion operations in a sugar factory are improved by g the off-gas from the 2nd carbonation step to the 1st tion step.
ff-gas from the 1st carbonation step can be cooled to e NH3 and other vapours by heat exchange against a cold stream, e.g. raw juice, clarified juice or lime-kiln gas.
ling the off-gas not only reduces CO2 consumption by 8-16% saves energy, since the recycled off-gas gives up 40-50% of to the cold juice in the 1st carbonation step.

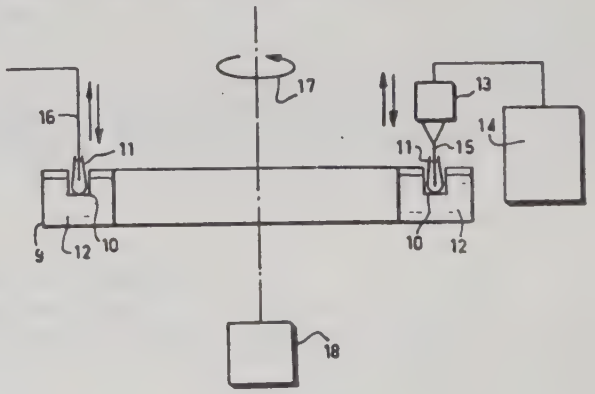
D17 29232 C/17 =EP --20-738
suspension for basket centrifuge esp. sugar crystal or - combats unbalanced basket oscillations with buffers and switch
T STATES MACH CO 14.12.78-US-969393
*P41 (07.01.81) *BE-880-611 B01d-33/10*
as 900170 E(DE FR GB NL SE)
248)

D17 02683 D/03 ★FR 2451-778
ous centrifuge partic. for drying sugar crystals - rates washing distributors and vapour suction pipes allowing g and drying of crystals before leaving basket
ES-CAIL BABCOCK 19.03.79-FR-006829
P41 (21.11.80) B04b-03 C13f-01/10
as 006829 (10pp1192)
nuous centrifuge comprises a vessel in which rotates a basket provided with a screen and surrounded by a collector ecovers the solid phase. The solid particles are ejected from ket into the vessel, over an edge provided at the end of larger he basket. Washing distributors allow the solid particles to be before their ejection. The centrifuge incorporates means of g out the vapours in the basket.
centrifuges are used in the prodn. of sugars. To avoid ge of the crystals against the wall of the vessel forming erates, vessels of large dia. are used. The invention resolves blem of ensuring sufficient sealing between the interior of the and the sugar chamber to prevent the passage of vapours g about the formation of agglomerates, partic. in the case the vessel of the centrifuge is fixed rigidly on a frame while ket is mounted on an elastic suspension.

D17 44427 A/25 =GB 1582-599
of seed crystals - by screening sepn. of fines followed by ng; used e.g. in sugar mfr.
ES-CAIL BABCOCK 14.12.76-FR-037581
*(14.01.81) *DE2755-717 B01d-09*
7 as 051798 (9pp1376)
ls suspension is a solution of the crystallisable product is d by centrifuging part of the suspension to separate larger

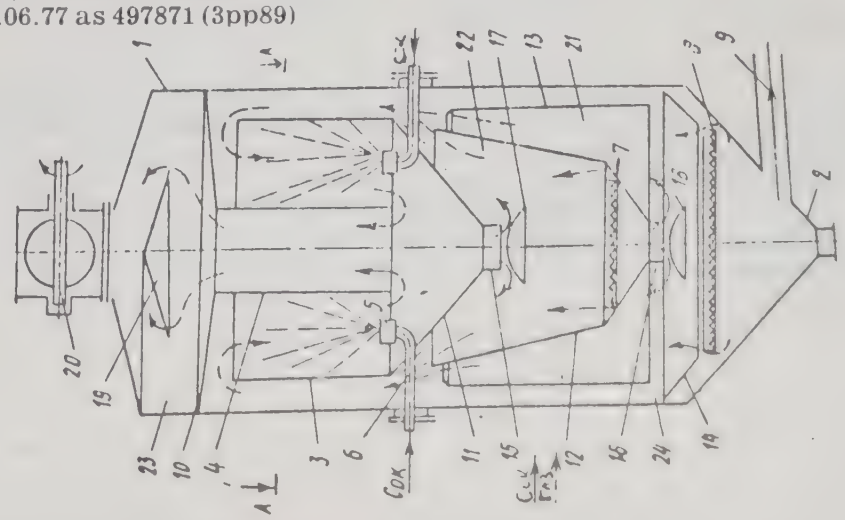
No. of nuclei in the solution can be controlled and kept constant.
crystals from the solution and smaller crystals, and then re-cycling the crystals after breaking them up.
Pref. the suspension is centrifuged a second time to separate small crystals which are used as crystallising nuclei.

INRG D17 08615 A/05 =GB 1582-855
Hydrolysis of starch dispersion in aq. medium - with hydrolase, contg. glucoamylase, used in gravimetric determn. of starch
INST NAT RECH AGRON 07.07.76-FR-021361
*S03 S05 (D16) (14.01.81) *DE2730-806 G01n-35 + C12p-19/14*
07.07.77 as 028635 (24pp982)
Dispersion of starch in an aq. medium is hydrolysed by using an enzymatic hydrolysis prepn. contg. at least glucoamylase. Hydrolysis enables the starch to be converted into glucose dissolved in the aq. medium and a hydrolysate to be obtd.
The hydrolysis is performed continuously by forming a segmented flow of a mixt. made up of the starch dispersion and the enzymatic hydrolysis prepn. The segmented flow comprises at least one composite fluid stream contg. at least one segment of the mixt. bounded at each end by a buffer of gas. The flow is circulated through a hydrolysis enclosure for a period sufficient to allow the starch dispersed in the aq. medium in one segment to be converted into glucose dissolved in the aq. medium.



TENC D17 72164 T/45 =J8 0049-637
Aq surface coating compsns contg hydroxyalkyl ether - of galactomannan gum - have superior flow and levelling props
TENNECO INC 23.06.71-US-156050
*A11 G02 (A82) (12.12.80) *US3700-612 C09d-03/72 C09d-05/02 C09d-07/12*
16.06.72 as 060341 (7pp)
Aq. surface coating compsn. comprising (I) 10-70% wt. water-insol. resinous binder selected from oleoresinous binders, vinyl polymers of monoethylenically unsatd. molecules and their mixts. (II) 0.01-2% pref. 0.1-1% wt. of a thickener that is the hydroxy-alkyl ether of a galactomannan gum wbere hydroxyalkyl gp. has 2-6C and the gum has a degree of substitution of 0.1-3.0.
Use of this thickener gives coating compsns. that spread smoothly without sagging or balling and have excellent flow and levelling characteristics. (J48016925).

KIFO = ★ D17 03422 D/03 ★SU -734-283
Sugar prodn. juice carbonator - has cylindrical shells coaxial with housing and holding cone for gas flow control
KIEV FOOD IND INST 13.06.77-SU-497871
(17.05.80) C13d-03/04
13.06.77 as 497871 (3pp89)



The sedimentation rate, the filtration characteristics and the purity of diffusion juice used in sugar prodn. are improved if the carbonator has housing which holds the concentric shells with the height of the inner one exceeding the height of the outer one.

A conical ring partition is attached to the top of the inner shell and the housing to separate zones of saturation from that of liquid and gas sepn.

MERE D17 68340 B/38 = US 4242-145
Fructose and gluconic acid prepn. from glucose fructose mixt. - by selective glucose oxidn. at alkaline pH using precious metal-activated oxygen
MERCK PATENT GMBH 20.02.78-CH-001809
*E17(E13) (30.12.80) *DE2903-388 C07c-59/10 C13k-03 + C13k-11*
21.02.79 as 013634 (5pp977)

Simultaneous prodn. of fructose and/or its salt and glucos
its salt from glucose-fructose mixt. comprises selectively
the glucose at pH 8-10 with oxygen, activated by nob
catalyst, and terminating the oxidising step upon forma
equiv., per mole of glucose employed, of the total amt. of ca
acid and carboxylate ion produced in the oxidising step.

The process is simple, proceeds in high yield and can be c
on any scale.

See Also
D16 SU 732381 D16 US 4242451

D18: SKINS; HIDES; LEATHER; TOBACCO

BRTA ★ D18 02051 D/03 ★BE -884-967
Smoke filter used to mfr. cigarette filter tips - has cellulose acetate or polypropylene body with fibrous cover of same material
BRIT AMER TOBACCO LTD 28.08.79-GB-029769
A97 F04 J01 P15 (16.12.80) A24d B01d
28.08.70 as 884967 (14pp597)
Smoke filter comprises a rod having, at least as major constituent, a filtration material formed of thermoplastic cellulose acetate or polypropylene. The body is wrapped in a cover comprising at least 50% fibres or filaments made of cellulose acetate or polypropylene of the same chemical identity as the filter material.

The wrapping is bound to the body and has an air permeability of not less than 10,000 Coresta units. The filter is made by impregnating a roll of filter material with a binding agent, forming it into a rod form and covering it with the fibrous cover.

Portions of the rod are used to form cigarette filter tips. Its quality is equal to that of previously proposed self-supporting filter material, the mfr. of which is expensive and can give rise to problems in dia. control.

BRTA ★ D18 02052 D/03 ★BE -884-968
Smoke filter used to mfr. cigarette filter tips - comprising filter material body with fibrous cover of thermoplastic material
BRIT AMER TOBACCO LTD 28.08.79-GB-029768
A97 F04 J01 P15 (16.12.80) A24d B01d
28.08.70 as 884968 (10pp597)
Filter comprises a rod comprising a filter material wrapped in fibrous or filamentous cover comprising at least 50% of fibres or filaments of thermoplastic material.

Portions of the rod are used to form cigarette filter tips. The quality is equal to that of previously proposed self-supporting filter material, the mfr. of which is expensive. The filter can be made by normal methods of paper covered filters.

BURR- D18 44059 B/24 = DS 2904-570
Paper tube for making hand-filled filter tipped cigarette - contains temporary removable filling pref. cellulose acetate fibres, to facilitate mechanised handling
BURRUS F J & CIE (BAUM) 10.02.78-CH-001489
*P15 (08.01.81) *BE-874-039 A24c-05/46 A24d-01*
07.02.79 as 904570 (5pp39)
Paper tubes for hand filled filter cigarettes are prepd. by rolling the cigarette paper around a strand of acetate cellulose fibres. Two of these are sepd. by a filter of twice the ultimate length and are joined to them by rolling a paper strip around. After cutting in the centre of the filter, they are ready for sale. When a customer wants to use them, he extrac the acetate cellulose fibre strand by pincers and fills in the shredded tobacco by hand.

The tubes thus have enough stability before use and do not cause the difficulty of hollow tubes.(DS)

PHIM D18 31067 C/17 = EP --20-472
Increasing filling power of tobacco - by incubation with cellulase, drying and expanding
PHILIP MORRIS INC 20.09.78-US-944226
*P15(D16) (07.01.81) *WP8000-651 A24b-03/18 + C12n-09/48*
17.09.79 as 901294 E(CH DE NL)
(WP8000651)

PHIM ★ D18 02467 D/03 ★EP
Smoking compsns. flavoured with pyrazine derivs. - includ pyrazinyl- and pyridyl-alkyl pyrazine derivs.
PHILIP MORRIS INC 05.06.79-US-045716
E13 P15 (07.01.81) A24b-15/38 C07d-241/12 C07d-401/0 403/06
05.06.80 as 301880 (42pp367) (E) FR1530436 DE2353467 DE FR2376852 E(CH DE FR LI NL)
Smoking compsns. comprise (a) natural or reconstituted tob a tobacco substitute and (b) 0.0005-2 wt.% of a cpd. of formula

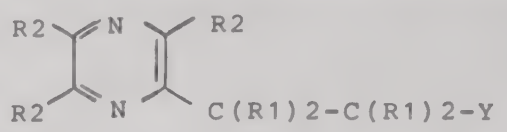
X-C(R)2-C(R)2-X' (I)

(R is H or 1-10C alkyl; X is pyrazinyl opt. substd. by 1-10C alk that X contains a total of 4-16C; X' is pyrazinyl or pyridyl b substd. by 1-10C alkyl such that X' contains 4-22C; and adja and X or R and X' gps. can form an alicyclic ring).

Pyrazine derivs. of formula (Ia) are also new:

(R1 is H, methyl or ethyl;
R2 is H or methyl;
Y is 3,5,6-tri-R2-2-pyrazinyl, 3,4,5,6-tetra-R2-2-pyridyl, 2,4,5,
R2-3-pyridyl or 2,3,5,6-tetra-R2-4-pyridyl; and any adjacent
R2 can form an alicyclic ring)..

(I) are less volatile than prior art pyrazine and pyridine used as tobacco flavorants and thus produce less pack ar effective flavouring concns. As well as flavouring tobacco, be incorporated in candles, fuel logs, room deodorisers, smoking fuels, cooking oils, sauces, gravies and dressings.



CIBA ★ D18 02643 D/03 ★EP
Pelt or fur dyeing with anionic dye - with simultaneous p before tanning in same acid bath at room temp.
CIBA GEIGY AG 06.06.79-CH-005269
E24 (07.01.81) C14c-03 D06p-03/30
02.06.80 as 810181 (22pp200) (G) FR-730360 SU-614142 US DE1519507 DS-832593 US2049547 5.Jnl.Ref E(CH DE FR GB IT
Opt. pre-oiled pelts or furs are dyed and tanned in one bath a (pref.. 35-40) deg. C in an aq. liquor of pH 1-4 by (a) dyeing least one anionic dye and pickling at the same time, and (b) t with at least one tanning agent.

The pelts or furs can be preliminarily oiled with mineral and/or animal oils and waxes, mixed esp. with emulsifiers..

The process is partic. suitable for treating sheep-skins, e. as car-seats.

Soft, supple dyed pelts or furs are obtd. and only the hair dyed. The one-bath process takes place at a lower temp., con to standard fur-dyeing temp. of 50-70 deg. C. Total dyei tanning time can be reduced from 40-50 hrs. to 24 hrs.

NIRA ★ D18 02907 D/03 ★J55
Cigarette filter prodn. - by mixing sodium arginate and pov active carbon into a sol and impregnating gas permeable m with the sol.
UNITIKA KK 24.04.79-JP-051212
A88 J01 P15 (12.11.80) A24d-03/06
24.04.79 as 051212 (3pp5)
Method involves (a) mixing sodium arginate and powdered ac in the sol state, (b) impregnating the sol into gas-permeable

l, (c) coagulation-bonding sodium arginate and powdered C to the basic material and (d) covering the thus prepared ical filter material with appropriate packaging material. g characteristics of the materials are improved sticaliy.

the gas-permeable basic material is urethane foam, rubber woven cloth, nonwoven fabric, bundled fibre, bulky cotton, etc. In (a) 10-40 w/w% sodium arginate powder and 60-90 powdered active C are mixed and the mixture is made into a water. In (c) the impregnated basic material is immersed in ating soln. contg. metal salt or acid for ca. 15 minutes.

/ ★ D18 D/03 ★SE 7904-289
for skinning mink - has point parts motor-impelled ersally to and-from each other, insertable in tail root and l necks
RGSTROM E I 16.05.79-SE-004289
12.80) A22b-05/16
9 004289 (-pp1161)
ol for skinning milk, permits the skin to be removed from the and rear legs and tail mechanically using a point divided ways into two parts. The two parts are displaceable ersally to and from one another with the aid of a motor, being uced in turn in to each femur neck of the limbs, and into the the tail.

= ★ D18 03270 D/03 ★SU-732-390
ium-tanning of leather - includes fixing zirconium salt with st sodium naphthenate soln.
MA ISOTOPE LAB 31.07.78-SU-653128
.05.80) C14c-03/04
8 as 653128 (2pp70)

Zirconium-tanning of leather is accelerated and improved, and the cost is reduced, by fixing the zirconium salt with sodium naphthenate, used in an amt of 3-5 wt.%(based on hide).

The pickled leather, e.g. sheepskin, is preliminarily treated with a kerosene emulsion for 45-60 min.Then it is treated with a low-basicity chrome extract(18-20% calculated as chromium oxide) in an amt. of 0.3 wt.%(based on hide) at 25-30 deg. C for 1.5-2.0 hr. subsequently the leather is heated at 75-80 deg. C.

SIRE/ D18 63432 B/35 = US 4242-226
Filter material for gas or liq. media, esp. tobacco smoke - using matrix of active carbon contg. at least one metal, the matrix formed by pyrolysing e.g. starch or cellulose derivs. (be 20.8.79)
SIREN M J 21.02.78-SE-002007 (21.02.78-SE-002006)
*A35 J01 P15 + P34 (A11) (30.12.80) *DE2906-510 C01b-31/08*
21.02.79 as 013442 (6pp964)
Filter material for filtering gaseous or liq. media, comprises prod. in the form of a matrix of activated C in which is uniformly dispersed at least one of Ca, Mg, Ba, Al, Cu and the transition metals. The prod. is formed by chemical reaction between cation of the metal and anionic gps. chemically bound to a polyhexose deriv. followed by pyrolysis and activation of the prod.

Pref. the anionic gps. bound to the polyhexose deriv. are carboxyl gps., sulphonic acid gps. or phosphoric acid gps.

The amt. of metal w.r.t. the amt. of activated C can be reproducibly adjusted to 10-50(10-35)wt.%.

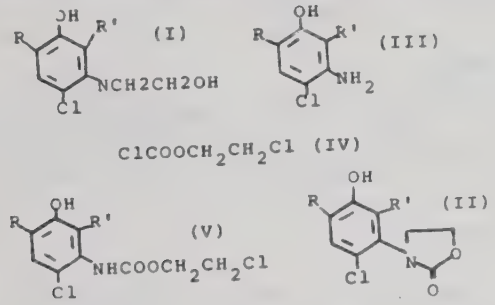
See Also

D13 US 4242269 D23 NL 165783

D2: DISINFECTANTS; DETERGENTS

D21 : DENTAL; TOILET PREPARATIONS

[illegible] ★ D21 02084 D/03 ★DE 2924-089
oro-hydroxy:ethylamino-phenol derivs. - useful as coupling nents for hair dyes
NKEL KG AUF AKTIEN 15.06.79-DE-924089
(08.01.81) A61k-07/13 C07c-89 C07c-91/44
9 as 924089 (17pp367)
d 4,6-Dichloro-3-(2-hydroxyethylamino) phenols of formula (I) w (where one of R and R' is Cl and the other is H).
on. consists of reacting dichloroaminophenol (III) with beta ethyl chloro formula (IV) giving beta chloroethyl-N-rohyoxyphenyl) carbamate (V) that ring closes to give lorohydroxyphenyl)oxazol-id-2-one (II) with the elimination of llowed by elimination of CO2 to give (I).
nd their acid-addn.salts are useful as coupling components for -type hair dyes. They have good water-solubility, storage ty and toxicological and dermatological properties and give e turquoise to blue-black dyeings with fastness.



E- ★ D21 02102 D/03 ★DE 2925-020
pick impregnated with anticariogenic agent - pref. with amine fluoride used for protection against caries in inter-dental s
ZBERT GMBH 21.06.79-DE-925020
7 E16 P32 (B05) (08.01.81) A61c-15 A61k-07/18
9 as 925020 (6pp367)
ated toothpicks comprise wood or a wood-like material gnated with an anticariogenic agent (I), pref. an amine fluoride.

is pref. N,N',N'-tris(2-hydroxyethyl)-N-octadecyl-nediamine dihydrofluoride, cetylamine hyofluoride or ecenylamine hydrofluoride. Mixts. of amine hydrofluorides lso be used. The toothpicks are pref. also impregnated with flavouring agents.

The toothpicks provide effective protection against caries in areas (e.g. interdental spaces) not normally accessible to toothbrushes.

BLEN ★ D21 02117 D/03 ★DE 2925-228
Inlay soap cakes mfr. - by chilling extruded sec. strand before inserting in basic strand surface
BLENDAX WERKE SCHNEIDER 22.06.79-DE-925228
(08.01.81) C11d-13/18
22.06.79 as 925228 (6pp39)
Pieces of inlay soap, consisting of a basic cake with a sec. insert in its surface, are produced by extruding both basic and sec. strand in separate extruders at a temp. of 35-45 dec.C (40 deg.C). The sec. strand is immediately on its exit chilled to 25-35 deg.C (30 deg.C). After separate stamping and cutting to size, the sec. insert is pressed into the recess of the basic cake.

This creates a firm bond between basic cake and insert and prevents deformation of the insert during the inlay operation.

LEEY/ ★ D21 02142 D/03 ★DE 2925-915
Lathering soap foil mfr. - by extrusion as film strip on endless belt and hot air drying before winding up to roll
LEE Y H 27.06.79-DE-925915
(08.01.81) C11d-13/14
27.06.79 as 925915 (16pp39)
Strips of lathering soap for instant use are prepd. by mixing a metallic salt of stearic acid with water soluble fibres and synthetic resin and by extruding a thin film on the surface of an endless belt conveyor. Jets of hot air are directed at an angle on the surface to dry the mixture. When the film has hardened, it is detached from the belt and a pattern is impressed on it before it is wound up to a roll.

The use of such soap foil is more hygienic than universally used cakes of soap which also waste material because they dry very slowly. The new soap foil is specially useful for travellers.

FARB ★ D21 02207 D/03 ★DE 2927-132
Weakly crosslinked polyacrylic acid powder prepn. - by PPTN. polymerisation in solvent mixt. contg. cyclohexane or chloro-hydrocarbon and specific oxygen-contg. solvent
BAYER AG 05.07.79-DE-927132
A14 B07 F06 (A96 A97) (08.01.81) C08f-220/06
05.07.79 as 927132 (37pp200)
Weakly crosslinked polyacrylic acid powder is prepd. by the pptn. polymerisation of 50-250 g/l acrylic acid in a mixt. of non-aromatic solvents, in the presence, w.r.t. acrylic acid, of 0.7-3.5 wt.% crosslinking monomer and of 0.05-1 wt.% radical -former, at 40-90 deg C. Novelty consists in using a solvent mixt. contg., by vol., (1) 80-90% cyclohexane or an aliphatic satd. 1-5C hydrocarbon contg. 1-4 Cl and (2) 1-20% n-propanol, a satd. aliphatic 4-6C monohydric alcohol, a 3-6C aliphatic satd. carboxylic acid ester or MeEtCO.
The prods. can be used in the prepn. of (i) pharmaceutical and cosmetic compsns., esp. clear gels, and also ointments and emulsions, (ii) printing pastes, e.g. for textiles and (iii) as thickeners for flooding water in sec. petroleum extn.
The polyacrylic acids have improved thickening activity and their gels have increased clarity and reduced graininess.

KEYP D21 31071 C/17 =EP --20-532
Aq. skin prepn. contg. lecithin and tri:ethanolamine - with prolonged moisturising action on skin and useful for burns
KEY PHARMACEUTICALS INC 27.09.78-US-946175
*A96 B04 (07.01.81) *WP8000-660 A61k-31/68*
27.09.79 as 901407 E(AT CH DE FR GB LU NL SE)
(WP8000660)

SCHO/ D21 87517 B/48 =EP --20-617
Water-contg. dentifrice for removing or preventing calculus - contains synergistic mixt. of strontium edatate and ricinoleate, and is free of other chelating metals
SCHOLE M L 30.10.78-US-956200
*B05 (07.01.81) *US4175-120 A61k-07/22*
30.10.79 as 901597 E(FR)
(WP8000914)

SOLA- D21 45097 C/25 =EP --20-681
Denture adhesive providing good adhesion to oral cavity - comprising a gum base and hydrophilic polymer
SOLAR DENTAL CO INC 27.09.79-US-079380 (05.12.78-US-966605)
*A96 (A11 A14) (07.01.81) *WP8001-166 C08l-07/02 C08l-19/02*
03.12.79 as 900031 E(AT CH DE FR GB NL)
(WP8001166)

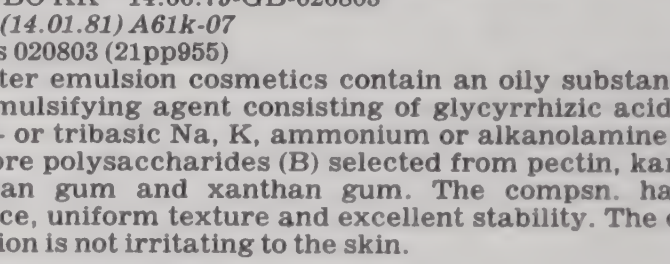
AMLE- D21 85825 B/47 =EP --20-706
Improving water solubility of lecithin for use in e.g. shampoo - by use of tert. amine oxide or specific surfactant as solubiliser
AMER LECITHIN CO 04.12.78-US-965998
*E19 (07.01.81) *US4174-296 A23j-07 B01j-13 C11d-09/30*
23.11.79 as 900102 E(FR)
(WP8001144)

CINO/ D21 49736 C/28 =EP --20-740
Forming denture model from impression member - with alterable block representing teeth adjusted during fitting
CINOTTI W 15.12.78-US-969940
*P32 (07.01.81) *WP8001-240 A61c-11*
14.12.79 as 900172 E(AT CH DE FR GB LU SE)
(WP8001240)

PROC ★ D21 02384 D/03 ★EP --21-505
Hair conditioning prods. - consisting of substrate, hair conditioning agent, and backing sheet
PROCTER & GAMBLE CO 20.06.79-US-050375
A96 E19 (07.01.81) A61k-07/06
12.06.80 as 200543 (37pp478) (E) US3992336 GB1304375 FR-958219 US3954113 GB2022415 GB2024623 E(BE DE FR GB IT NL)
Hair conditioning prod. consists of: (a) a flexible, impervious, nonabsorbent, planar substrate; (b) a hair conditioning agent (I) releasably associated with the 1st surface of the substrate; and (c) a backing sheet fixed to the 2nd surface of the substrate. Pref. (I) are quat. NH4 salts, sorbitan esters, fatty alcohols, polyhydric alcohol esters, fatty acid salts, aliphatic ethers, or mixts., e.g. ditallow di-MeNH4 chloride (Cpd.A)..
The prod. when used on hair which has recently been shampooed is more efficient, effective, and convenient to use than commercial prods. in imparting to the hair combing, detangling, static flyaway, softness, lustre, and manageability benefits.

OREA D21 76265 A/43 =GB 1
Aerosol dispenser contg. hair lacquer compsn. - contg. a fluoroalkane to reduce the flammability of the compsn.
L'OREAL SA 26.04.77-FR-012570
*A96 E16 (14.01.81) *BE-866-097 C09k-03/30*
25.04.78 as 016311 (7pp393)
Pressurised container contains a hair lacquer compsn. parti the gaseous phase and partially in a single liq. phase. The con has at least one distribution value supplying liq. to an ato device.
The compsn. comprises at least one resin, a liq. flammabl aq. phase capable of dissolving the resin and a propellant of w part is in the gas phase in the interior of the container and comprises CO2 and/or N2O under pressure partially dissolved single liq. phase. The compsn. also contains at le bromofluoroalkene as flammability reducing agent. flammability of the aerosol jet is considerably reduced.

AMCY D21 66747 Y/37 #GB 15
(Alpha)-cyanobenzyl-(2)-naphthalene-acetates - useful as insect and acaricidal agents
AMERICAN CYANAMID CO 02.04.76-US-673244 (06.04.7 014677)
*B05 C03 (14.01.81) *US4046-799 A01n-37 C07c-69/61 C07c-121*
06.04.77 as 014677 (30pp918)
Naphthalene acetic acid derivs. of formula (I) are new where R 4C alkyl, R2 is H or -CN, and R3 and R4 is halo or methyl, m and 0-2 and y is oxygen, sulphur or methylene. (I) is prepd. by react 2-naphthalene acetyl halide with a phenoxybenzyl alcohol in a r ratio of 1-1.5:1. The reaction is conducted in the presence of an acceptor and an aprotic solvent at a temp. of 0-30 deg.C.
(I) (pref. alpha-cyano-m-phenoxybenzyl alpha-isopro naphthalene acetate) is a miticide used in the protectio agronomic crops and in the control of ectoparasites on w blooded animals.



KANE ★ D21 02738 D/03 ★GB 205
Stable oil-in-water cosmetic emulsions - contg. glycyrrhizic ac its salts and soluble polysaccharide as emulsifiers
KANEBO KK 14.06.79-GB-020803
E13 (14.01.81) A61k-07
14.06.79 as 020803 (21pp955)
Oil in water emulsion cosmetics contain an oily substance, w and an emulsifying agent consisting of glycyrrhizic acid (A) c mono-, di- or tribasic Na, K, ammonium or alkanolamine salts, one or more polysaccharides (B) selected from pectin, karaya g locust bean gum and xanthan gum. The compsn. has a appearance, uniform texture and excellent stability. The emuls combination is not irritating to the skin.

PACI- ★ D21 02768 D/03 ★GB 205
Moisturising component for cosmetics - prepd. from skim mil simultaneous action of protease and lactic acid bacteria
PACIFIC CHEM IND CO 01.05.79-KR-001389
(D16) (14.01.81) C07g-07
29.04.80 as 014108 (14pp955)
Skim milk is simultaneously subjected to fermentation by lactic bacteria and the action of aprotease. at 35-40 deg.C for 12-48 hrs, heated to a temp. and for a time sufficient to sterilise it inactivate the enzyme.
The process is quicker, simpler and cheaper than the prior process in which fermentation and protease treatment were car out separately with heat treatment steps after each. decomposition of caslin by the protease accelerates the growth o bacteria. Suitable bacteria include L. acidophilus, L. bulgaricu Casei and Str. thermophilus.

KURS ★ D21 03032 D/03 ★J5 514
Plugging material for dental use - comprises a polymeris monomer, filler, catalyst and activator, and prevents secon tooth decay, esp. in children
KURARAY KK 02.05.79-JP-054579
A96 (A14) (13.11.80) A61k-06/08
02.05.79 as 054579 (5pp5)
Plugging material is composed of (a) polymerisable monomer filler, (c) catalyst and (d) activator and has a shearing stress of per sec. and a viscosity, measured at 25 deg.C using a Weizenb rheogonimeter, of 200-5000 poise (pref. 400-2000 poise). The plug material is packaged in at least two parcels to allow catalyst (c) activator (d) their first contact in use.
(a) is pref. 2,2'-(p-(gamma-methacryloxy-ydroxypropo hexyl)propane, triethylene glycol dimethacrylate, tetraethy glycol dimethacrylate, etc. The filler is pref. powdery silica, g

owdery Al oxide, powdery polymethylmethacrylate, etc. a) and (b) are used with a wt. proportion of 30-43:70-57. The is pref. benzyl peroxide and the activator is pref. N'N'-oltoluidine, N,N'-diethanoltoluidine.
aterial can be easily plugged in the cavity of a decaying hout forming voids between the cavity and the plugging , thus preventing the secondary decay of the tooth. Due to ty the material can be used as the plugging material for ar teeth, an infant's permanent molar teeth, etc.

D21 03033 D/03 ★J5 5145-607
ntg. compsn. prodn. - by combining one or more of citric, maleic etc. acids with di:butyl-hydroxy-toluene in aloe

DENTRIFICE KK 28.04.79-JP-053206
(13.11.80) A61k-07
as 053206 (4pp5)
npsn. is obtd. by combining (a) at least one of citric acid, acid, maleic acid, pyruvic acid, and phosphoric acid and (b) ydroxytoluene (BHT) in aloe juice contg. alloin. Pref. pH of psn. is 4.0-6.5. BHT is used in amt. 0.001-0.5 w/w% of the and the acid is used in amt. 0.1-10 fold the amt. of BHT.
rowning of alloin at high temp. and by UV irradiation is ely prevented.

D21 03034 D/03 ★J5 5145-608
nd oil resistant cosmetic - contains water soluble anionic coside and tert. ammonium type cationic surfactant
EIDO KK 02.05.79-JP-054339
(13.11.80) A61k-07
as 054339 (4pp5)
ic contains (a) water soluble anionic polymer of coside and (b) tert.-ammonium type cationic surfactant. The ents (a) and (b) react mutually and form the polyionic x.
e anionic polymer of glycosides (a) sodium salt of CMC, e sulphate, arginic acid, chondroitin sulphate, etc. can be nd as the tert.-ammonium type cationic surfactant (b) kyltrimethylammonium salt, dialkyldimethylammonium ialkylmonomethylammonium salt, monoalkyl-monoaryl-yl-ammonium salt, etc. can be used. By changing the kind proportion of the ingredients the solubility of obtd. polyionic x can be changed freely.

D21 03035 D/03 ★J5 5145-609
epellent cosmetic with excellent skin affinity - contains alkyl ium cellulose sulphate to increase viscosity of oily cosmetic
SEIDO KK 02.05.79-JP-054340
(13.11.80) A61k-07
as 054340 (3pp5)
smetic or oily gelatinous cosmetic, has its viscosity increased n. of alkylammonium cellulose sulphate (AACS). AACS is d from dimethyldi-12-18C alkylammonium CS, trimethyl-22C-alkylammonium CS and methyl-tri-8-18C-mmonium CS and AACS is combined 0.01-5.00 w/w% pref. 0 w/w% in objective cosmetics.
S shows excellent viscosity-increasing effect on liq. oil such as araffin, squalane, IPM, hexadecylalcohol, etc. and can be ed in liq. oil at rather low temp. of ca. 50 deg.C. Thus with it metics which have the viscosity up to decade thousands cps. ow from transparent to cloudy appearance, can be obtd. and metic is excellent in the affinity to skin and water-repelling y.

D21 17255 Y/10 = J8 0049-561
paste compsn. contg. sucrose fatty acid ester - as safe g and foaming agent
J STAR DENTIFRICE 09.07.75-JP-084615
*(12.12.80) *J52010-427 A61k-07/16*
5 as 084615 (5pp5)
mpsns. contain sucrose fatty acid ester of which 90% of the cid component is a 12 and/or 14C fatty acid and whose average ication degree is 1.2-1.8. The sucrose fatty acid is free from nd oral mucous membrane stimulation problems and has nt cleaning foaming activity. It is not inactivated even in the ce of enzymes. (J52010427).

D21 42292 Y/24 = J8 0049-562
rice compsns. contg. lysozyme stabilised with sodium fluoride mbination with abrasives and anionic surfactants and/or ionic g agents, for bactericidal and antiinflammatory effect
N STAR DENTIFRICE 28.10.75-JP-130068
*3 B04 E19 (12.12.80) *J52054-037 A61k-07/28*
5 as 130068 (4pp16)
yme is beneficial because of its bactericidal and anti-matory activities, but it is quickly inactivated by anionic tants and ionic pasting agents which are common components of toothpaste. It has now been found that lysozyme is satisfactorily stabilised by sodium fluoride. 0.05-5 wt.% lysozyme and 0.02-5 wt.% sodium fluoride are used.
The anionic surfactants are e.g. sodium lauryl sulphate (SLS), sodium acylsarcosines, alpha-olefin sulphonates and sodium glyceride sulphates. Typical ionic pasting agents include CMC, carrageenan and sodium arginate. Pref. amt. of the surfactant is 0.1-2% and of the pasting agent is 0.5-2%.
Pref. abrasives are aluminium hydroxide, plastic powders, insol. sodium metaphosphate, calcium pyrophosphate, silicic anhydride and aluminium silicate. (J52054037).

TOXP D21 02932 A/02 = J8 0049-564
Base compsn. for coating teeth - comprises ester gum and opt. rosin in solvent and gives coating compsn. after compounding with fluorine-contg. cpd.
TOYA SEYAKU KASEI 15.05.76-JP-055619
*A96 B05 (12.12.80) *J52139-716 A61k-47 + A61k-09/08*
15.05.76 as 055619 (4pp69)
Coating base for teeth comprises a solute comprising ester gum or ester gum and rosin dissolved or dispersed in a water-insol. organic solvent or a solvent system comprising the above solvent and a water-soluble organic solvent (in a case of ester gum alone, solvent system is a mixed solvent). Pref. amt. of solvent system in the total base compsn. is 10-60 (15-35) wt.%. The amt. of water insoluble solvent in the mixed solvent system is greater than 10 (20-60) wt.%. Pref. water-insoluble solvent is glycerin-1,3-diethyl ether, acetyl monoglyceride, ethyl acetate, ethyl propionate, benzyl benzoate and/or diethyl carbonate, Pref. amt. of ester gum is a mixed solute system is greater than 20 (45-80) wt.%.
A coating compsn. for teeth is obtd. by compounding a fluorinated cpd. into the base compsn. Pref. amt. of fluorinated cpd. (esp. sodium fluoride,strontium fluoride, stannous fluoride or silver fluoride) is less than 6 (0.9-2.5) wt.% (J52139716).

WEBS D21 33050 V/18 = J8 0049-975
Lipstick packing machine - using vertical hot air jets to prevent cooling voids at base of cast lipstick
WEBSTER E LTD 17.10.72-GB-047788
*+P24 Q31 (15.12.80) *DE2352-175 A61k-07/02 B29d-23 B29d-31*
17.10.72 as 047788 (4pp)
Each of the conventional lipstick cases, with travelling base holder for the solidified wax mixt, and with internal ogive shaped, temporary mould has an opening in its base and is loaded into a chain convey or base upwards to pass first through a casting filling station and then heated/ cooled air are directed on to the end of the material as it solidifies, from a row of vertical nozzles fed by a common plenum, as the cases in steps below them and through the base openings.
This prevents formation of cooling voids leading to weak mechanical bonding of lipstick. (J49097086).

SHIS D21 49819 B/27 = J8 0050-005
Red pigment for use in cosmetics - is prepd. by reacting rhodamine B and anionic pigment and adsorbing obtd. complex on clay
SHISEIDO KK 31.10.77-JP-130466
*E24 (16.12.80) *J54064-644 A61k-07/02*
31.10.77 as 130466 (8pp42)
The red pigment is prepd. by reaction between rhodamine B (II) and an anionic pigment (III) and adsorption of the obtd. complex on clay (IV). The cosmetic has a bright colour and a Wide range of colours can be prepd.
(III) is e.g. lake red, acid red, sunset yellow FGF, orange I, orange II, naphthol yellow S or quinoline yellow. (IV) is e.g. montmorillonite, kaolin or illite. When aq. solns. of (II) and (III) are mixed the complex is obtd. as a ppte. (J54064644).

SUNZ D21 48600 C/28 = J8 0050-006
Buccal compsn., e.g. tooth paste - contg. mutanase and lysin
SUN STAR HAMIGAKI K 16.11.78-JP-141776
*A96 (D16) (16.12.80) *J55069-504 A61k-07/28*
16.11.78 as 141776 (3pp22)
The amt. of lysin used is 0.001 to 10 wt.% and that of mutanase is 0.1-20 wt.%. Lysin acts as activating agent for mutanase. The mutanase is obtd. by cultivation of microorganism such as Trichoderma harzianum OMZ 779, Cladosporium resinae QM 7998, Flavobacterium sp., Streptomyces werransis Fl, Streptomyces sp. KI-8, etc. on a culture medium contg. alpha-1,3-glucan, etc. The compsn. contains conventional ingredients for dental paste.
In an example, the compsn. consisted of 45 wt.% calcium monohydrogen phosphate, 15 wt.% glycerin 10 wt.% sorbitol, 0.5 wt.% Na carboxymethyl cellulose 0.5 wt.% carrageenan, 1.5 wt.% sodium lauryl sulphate, 0.2 wt.% sodium saccharin, 0.1 wt.% mutanase (50000 unit/g), 0.1 wt.% lysin, 1.0 wt.% perfume and balance water. (J55069504).

SHOF D21 18728 Y/11 = J8 0050-094
Dental amalgam powder compsn. - is a mixt. of alloy contg. silver, tin, copper, indium, zinc and alloy contg. silver, copper, tin
SHOFU TOSHI SEIZO KK 19.07.75-JP-088612
*M22 P53 (M26) (16.12.80) *J52012-658 C22c-05/06 + A61k-06/04 B22f-01 C22c-01*
19.07.75 as 088612 (5pp66)
Dental amalgam powder comprises (a) 45-85 wt.% of an alloy powder consisting of Ag 60-72 wt.%, Sn 20-30 wt.%, Cu 1-9 wt.%, In 2-10 wt.%, Zn 0-0.5 wt.%; and (b) 55-15 wt.% of an alloy powder consisting of Ag 66-76 wt.%, Cu 23-32 wt.%, Sn 1-10 wt.%. Particle size of the powder is not more than 44 microns.

Amalgam has good physical properties, and high initial strength. It is prevented from blackening because of being hardened in the mouth. (J52012658).

MOCH = ★ D21 03316 D/03 ★SU -733-681
Insect, e.g. mosquito, repellent cream - includes di:ethyl toluamide, paraffin wax, ceresin, fat and stearic acid and its mono:glyceride
MOSC CHEM IND RES 11.07.77-SU-507962
B05 (25.05.80) A61k-07/40
11.07.77 as 507962 (2pp938)
Insect repellent cream contains (in wt.%): diethyl-toluamide 10-20; Carboxide (RTM) 10-20; paraffin wax 1-2; ceresin 1-2; fat base 20-35; stearic acid 7-10; stearic acid monoglyceride 10-14; scent 0.1-0.3 and filler the rest. The addn. of Carboxide, stearic acid and its monoglyceride increases the insect repellent activity and reduces the toxicity of the cream.

The cream gives effective protection against mosquitoes, gnats and other blood-sucking flying insects without irritating skin. Doses of 1.5-2.0 g. can be used to cover the open skin areas (hands, face, legs etc.). Bul.18/15.5.80.

SASA/ ★ D21 03538 D/03 ★US 4242-089
Dental prosthesis with magnetic retention - using less expensive and more corrosion resistant palladium-cobalt alloy
SASAKI H 13.09.79-US-075540 (04.10.77-US-839477)
P32 (30.12.80) A61c-13/22
13.09.79 as 075540 (3pp1358)
A prosthesis includes a denture plate with an embedded magnet, and Pd-Co alloy attached to the upper surface of a root cap imbedded in a tooth root. When the plate is brought close to the cap the magnetic force holds them together.

An alternative arrangement has a denture or crown comprising artificial teeth of Pd-Co alloy fused to the inside of porcelain. Projecting inner crowns of nonmagnetic material act as abutments imbedded in the tooth root set and magnets are fixed in each inner crown. The alloy has better corrosion properties than Au-Pd alloys and is less expansive.

WARN ★ D21 03600 D/03 ★U
Bondable agar dental impression material - contains high polyethylene oxide polymer to improve viscosity and compressive strength
WARNER-LAMBERT CO 11.06.79-US-047432
A96 (A25) (30.12.80) C08l-05/12
11.06.79 as 047432 (3pp960)
In an agar-agar dental impression material, the impr comprises the inclusion of a poly(ethylene oxide) polymer of 100000-5000000, pref. as 0.1-1.0 wt.%.

The material has excellent flow characteristics and bonding ability to alginate or irreversible hydrocolloi impression materials. It can be easily ejected from a needle and coalesces into a homogeneous mass against the other oral tissues.

MERC/ ★ D21 03622 D/03 ★US
Providing threaded bore in dental cast - for mounting in art jig for denture fabrication
MERCER R W 09.04.79-US-028536 (18.04.77-US-788236)
A96 (30.12.80) B29c-05 B29d-03
09.04.79 as 028536 (13pp295)
A threaded bore is provided in a dental cast and receives which attaches the cast to a jig. The bore is formed by cu cavity in the cast and filling it with a cold-setting material int a screw is inserted. Pref.the cavity is undercut to increa structural rigidity of the solidified button of cold-setting m and pref. the cavity has an outwardly extending detent to increase the rigidity of the button. Pref. the screw thread longitudinal notch at its distal end which acts as a lock to p accidental removal of the screw.

The screw attaches the dental cast to an articulator which partial dentures or crowns to be created. The screw thread p removal and reattachment of the cast to the articulator denture formation.

VLOC/ ★ D21 03637 D/03 ★US 4
Synergistic anti:plaque oral hygiene compsns. - contg. cocoa p and peppermint, spearmint or cinnamon oil
VLOCK D G 22.08.79-US-068825
B04 (30.12.80) A61k-07/26 A61k-09/68
22.08.79 as 068825 (4pp1248)
Antiplaque oral hygiene compsn. comprises (a) a cocoa powd (b) peppermint, spearmint and/or cinnamon oil. The con contain the usual additives, e.g. abrasives, surfactants, bi vehicles, foaming agents, fragrances.

Components (a) and (b) cause a synergistic action in reduc inhibiting plaque formation. The comspsn. are pref. dentifrice may also be mouthwashes, chewing gums, lozenges, Components (b) are known antiplaque agents, see U.S.415671 (a) is a known anticaries agent.

See Also

D13 EP -20431	D13 EP -21949	D13 US 4242
D16 J8 0049571	D22 US 4242336	D23 NL 1657
D25 BE 883952	D25 EP -21546	

D22: BANDAGES; DRESSINGS

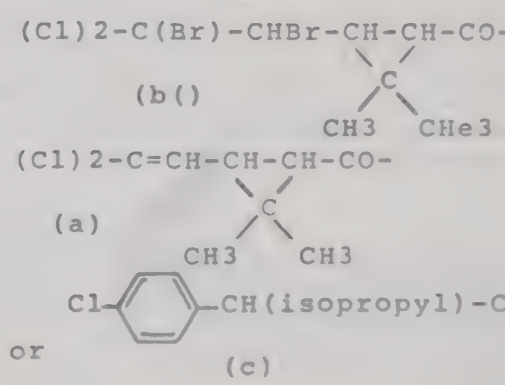
HAHG ★ D22 02159 D/03 ★DE 2926-130
Sanitary tampon - with retrieval cord wound with spacing around strip of absorbent mat, enables mass prodn.
HAHN DR C KG 28.06.79-DE-926130
P32 (08.01.81) A61f-13/20
28.06.79 as 926130
Tampon is made by rolling up a single strip of a fibre mat material and pressing it to a cylinder. The retrieval cord is slung around the centre part of the strip in a wide pitched spiral turn or attached to it with a spacing by a clove hitch before the rolling operation.

The two strands of the cord which protrude from the tampon are sepd. from each other by several turns of the strip. This prevents a spiral extraction of the centre and facilitates mass prodn. of the tampons.

CIBA ★ D22 02316 D/03 ★DE 3024-018
Pesticidal tri:halo-vinyl-oxy-benzene derivs. - esp. for protecting keratin materials against insects
CIBA GEIGY AG 29.06.79-CH-006093
C03 E14 F06 (08.01.81) A01n-37/10 A01n-53 C07c-69/74 C07c-121/75 C07c-153/06 D06m-13/16
26.06.80 as 024018 (32pp1251)
Vinyloxy benzene derivs. of formula (I) are new. In (I), R1 is a gp.(a)-(c); R2 is H, methyl, cyano, X1 is fluoro or chloro. Also new are intermediates (V) having R1 replaced by H.

Keratinous material is protected against damage by insects by treating with cpds. (Ia) (Where R3 and R4 are fluoro, chloro, bromo or methyl, and R5 is H or cyano).

(I) are pesticides, esp. useful against insects and acarids infest plants, flies and mosquitoes; examples also illustrate ac against fungi and nematodes. They are particularly usef protecting keratinous goods, e.g. woollens, against moths etc can be applied by standard exhaust dyeing or padding metho as a soln. in organic cleaning solvents.



D22 02348 D/03 ★DE 3025-273
ic disinfection of hands with volatile disinfectant - using ector and timed sequence on spray pump for use in food es
UN CO LTD 03.07.79-JP-U91521
06 X25 P34 (08.01.81) A611-02/18
as 025273 (12pp1053)
tant system has a container for volatile disinfectant ed to a pump. The unit has a housing into which the operators re placed. A photosensitive switch then operates a timed nich switches on the pump.
ectant (e.g. alcohol) is sprayed from a nozzle onto the hands time after which the unit switches off. Insertion of the hands ots a light beam between a lamp, a mirror and a detector, nen operates the timer.
des automatic decontaimination and disinfection of hands the need for the operative to touch anything which could a point for infection to be transmitted.

D22 77929 X/42 =DS 2612-846
absorbing resin prodn - by polymerising starch or cellulose satd monomer and crosslinking
YO CHEM IND LTD (SANN) 27.03.75-JP-037669
*C03 E17 +P21 P32 (E16 E32 E33) (08.01.81) *DE2612-C08f-251*
as 612846 (6pp260)
are produced by polymerising (a) at least one starch with (b) one monomer contg. a polymerisable double bond, which is soluble or can be made water soluble by hydrolysis and (c) at ne crosslinking agent. The prod. hydrolysed in case (b) is not soluble. The water absorbing powers of the resin are adjusted ast 60 ml./g.
crosslinking agent is a cpd. (d) at least 2 polymerisable double (e) at least 1 polymerisable double bond and at least one nal gp. reactive to monomer (b), (f) at least 2 functional gp. e to monomer (b) or (g) an oxide, hydroxide or salt of a weak an alkaline earth metal or Zn.
ns with high water absorbing powers can be produced. The can be used for throw away wipes, are cheap and radable.(DS)

D22 69767 B/38 =EP --20-529
absorbent films and fibres prepn. - by photopolymerisation of of neutralised acrylic acid and alkyl (meth)acrylate(s) using initiator
DDRICH B F CO 16.10.78-US-951906
*F01 +P21 P34 (A96) (07.01.81) *US4167-464 C08f-02/46*
as 901403 E(DE FR GB NL SE)
0844)

D22 45086 C/25 =EP --20-580
able paper pants - with integrated absorbent lining
UYEN P S 09.10.79-CH-009060 (11.12.78-CH-012581)
*P21 P32 (07.01.81) *WP8001-133 A41b-09/04 A61f-13/16*
as 901531 E(FR)
01133)

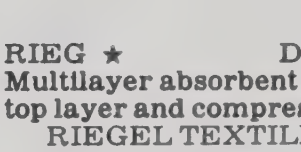
D22 29221 C/17 =EP --20-673
bent restraining pad for esp. abdominal surgical operations - ened with deformable non-elastic core, e.g. aluminium strip
O PLAST AS 12.12.78-DK-005581
*P31 +P32 P34 (07.01.81) *BE-880-569 A61b-17/02 A61b-19 f-13/20 A61l-15 C09k-03/32*
9 as 900012 E(CH DE FR GB NL SE)
01239)

D22 45087 C/25 =EP --20-713
dation resistant ostomy seal - obtd. by irradiating a mixt. ising an acrylamide polymer, poly:ol and water
AMOND SHAMROCK CORP 08.12.78-US-967606
*6 P32 (07.01.81) *WP8001-138 A61f-05/44*
9 as 900110 E(AT CH DE FR GB LU NL SE)
01138)

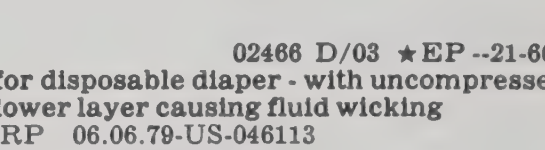
D22 53277 C/30 =EP --20-753
g tissue skin equiv. prepn. - by contraction of hydrated collagen e with fibroblast cells
ASSACHUSETTS INST TECH 26.12.78-US-972832
*.01.81) *WP8001-350 A01n-01/02*

PROC D22 84085 C/47 =EP --21-492
Disposable diaper with wetness indicator - is pH sensitive indicator as solid in adhesive matrix
PROCTER & GAMBLE CO 18.06.79-US-050013
*E14 P32 +P21 (07.01.81) *US4231-370 +A41b-13/02 G01n-21*
09.06.80 as 200525 (28pp200) (E) US4022211 US3004895 GB2022423 US2537124 E(BE DE FR GB IT NL)
Disposable nappy-type garment contains a wetness indicator consisting of a solid-solid mixt. of a pH-change/colour-change material dispersed in a highly flexible matrix of adhesive material, pref. of latex adhesive. The indicator is placed between a flexible, translucent cover member, e.g. a thermoplastic backsheet, and a flexible absorbent member, and is coated on an area of one of the members so as to be visible through cover while wettable by urine-contg. liq. in absorbent.
After the indicator has changed colour it remains immobilised in matrix.

JOHS ★ D22 02422 D/03 ★EP --21-586
Controlling evapn. rate of volatile perfume - from continuous air freshener, by addn. of nonionic surfactant or fatty di:alkanol:amide, deriv.
JOHNSON S C & SONS INC 21.05.79-US-040807
E16 P34 (E17) (07.01.81) A611-09/04
15.05.80 as 301593 (22pp478) (E) FR2380328 FR2385404 BE-865425 US3016199 US4078050 FR1590898 FR1603822 E(AT BE CH DE FR GB IT LI LU NL SE)
The rate of evapn. of a volatile perfume from an absorbent substrate in a continuous action air freshener is controlled by incorporating into the perfume 10-900% by wt. (of perfume) of a nonionic surfactant (I) having average 1-5 mol. of ethylene oxide (EO), a dialkanolamide of a 13-18C alkanoic acid, of formula (II), or a dialkanolamine adduct of (II), of formula (III). (m and n are 1-4; R is 12-18C alkyl)..
Use of the above vapour control agents effectively controls the rate of release of volatile perfumes from continuous action air fresheners, and extends their usable lifetime to 30-60 days. The fragrance profile of aged perfumes is improved.



(II)



(III)

RIEG ★ D22 02466 D/03 ★EP --21-662
Multilayer absorbent pad for disposable diaper - with uncompressed top layer and compressed lower layer causing fluid wicking
RIEGEL TEXTILE CORP 06.06.79-US-046113
F07 P21 P32 (07.01.81) A41b-13/02 A61f-13/18
05.06.80 as 301879 (25pp295) (E) NO-CITNS. E(AT BE CH DE FR GB IT LI LU NL SE)
The absorbent pad includes a top layer formed of an uncompressed batt of fiberized cellulosic fibres having a cationic debonding agent incorporated in it prior to fiberization. Thus a more complete fiberization is obtained. This gives greater height and lift to the batt while producing resistance to normally-occuring hydrogen bonds between the fibres.
A bottom layer comprises a compressed batt of fiberized cellulosic fibres without a cationic debonding agent. This gives the batt a greater fibre density than the top layer and has normally occuring hydrogen bonds.
Mfr. of the pad is by mechanically fiberizing wet pressed cellulosic sheets, air-laying of fibres and compressing..
The pad is used in a disposable adsorbent article such as a diaper. It is encased between a fluid impermeable bottom sheet and a fluid-permeable top sheet.

KURE ★ D22 02506 D/03 ★EP --21-750
Shaped material with surface of acylated de-N acetylated chitin - useful as absorbents for chromatography, as surgical articles
KUREHA KAGAKU KOGYO 15.06.79-JP-075401
A96 B07 F07 (A11) (07.01.81) C08b-37/10
13.06.80 as 302001 (24pp1248) (E) DS-894993 US4111810 EP--13181 1.Jnl.Ref E(DE FR GB IT NL SE)
Shaped material having an outer surface layer comprising an acylated de-N-acetylated chitin (I) is prepd. by contacting an aq. soln. of a de-N-acetylated chitin (II) or its salt with a liquid contg. an organic acid anhydride and a suspending agent in such a way that the material is formed in the desired shape..
The material may be produced in various shapes, including spherical particles and fibres. They may consist of (I) throughout, or their interior may consist of (II) and e.g. in fibres the (II) may then be removed to give hollow fibres. (I) are insoluble in water, acids, alkalis and organic solvents, and they are physiologically stable and safe, and can show good permeability, absorbability and biocompatibility. The shaped materials, esp. in spherical form, can be used as absorbents in chromatography or in ion exchangers, or as base materials on which enzymes, antibodies or antigens are immobilised or as capsules for slow release of therapeutic agents.

They can be used in dialysis, e.g. for sepn. of heavy metals or in ultrafiltration. The materials can be used for blood perfusion, in pads for surgical injuries, as absorbents of gastrointestinal toxins and to coat absorbents such as active charcoal. When the material is used in contact with blood, the degree of acylation may be lower, so that residual amino gps., remain free to form a polyion with an antithrombolytic agent such as heparin or chitin sulphate.

ACDC- ★ D22 02541 D/03 ★EP --21-828
Soft hydrophilic contact lens sterilisation unit - with lens holder requiring small volume of liquid to reduce power requirements
ACDC STERILENS LTD 25.06.79-US-051765
S05 X27 P34 P81 (07.01.81) A611-02/04 G02c-13
25.06.80 as 302126 (20pp295) (E) NO-CITNS. E(DE FR GB IT)
Contact lenses are disinfected using an apparatus which includes a lens holder, a heat disinfecting unit and a heater. The lens holder consists of a hollow housing in which the lens is held close to the housing inner surface.
The heat disinfecting units has a casing with a recess shaped to receive the lens holder. The heater is located in the recess and contacts a large part of the outer surface of the housing. The heater includes an electrical conductor thermally isolated from any substantial metal body and separated by thermal insulation from the casing..
The lens holder requires only a small amount of liquid, pref. less than 1 c.c. and thus there is minimal use of electrical energy for heating purposes. The device can therefore if desired be battery powered.

PASS/ ★ D22 02607 D/03 ★EP --22-010
Animals litter comprising hemp residue and/or grape pulp - having high water absorption and forming valuable fertiliser
PASSERI M A 22.06.79-FR-016172
P14 (07.01.81) A01k-01/ C05f-03*
26.06.80 as 400928 (15pp597) (F) BE-863556 US2712811 E(AT BE CH DE GB LI LU NL)
Animal litter comprises cannabic (hemp) by-prods and/or grape pulps screened to the required particle size and having a large absorption capacity for wet material..
The litter absorbs up to 250% of wet material and therefore can be used for longer periods (e.g. 40 days in stables) compared with straw. Also it does not have the storage and other hazards associated with straw. After use the material combined with animal excreta may be used as fertiliser.

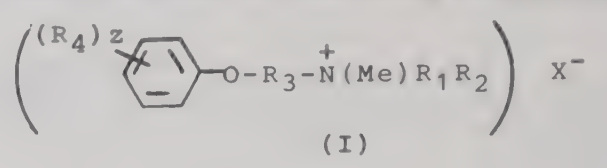
IMMU- ★ D22 02671 D/03 ★EP --22-128
Preserving lipoprotein samples for electrophoretic analysis - by adding sugar and freeze drying, esp. to preserve control sera (AT 15.7.80)
IMMUNO AG 27.06.79-AT-004484
J04 S03 (S05) (07.01.81) G01n-33/96
18.06.80 as 890068 (9pp367) (G) DE2727730 US4045176 US4127502 DE2825391 AT-320865 US4188188 E(BE CH DE FR GB IT LI LU NL SE)
Method preserving human or animal plasma, plasma fractions or sera contg. lipoproteins (esp. LDL, VLDL and HDL lipoproteins) prior to electrophoretic analysis comprises adding a non-reducing sugar (esp. sucrose) and freeze drying..
The method is esp. useful for preserving control sera for electrophoretic determn. of the lipoprotein profiles of plasma or serum samples. The freeze-dried controls can be stored at 37 deg. C for at least a year without significant changes in lipoprotein profile.

ALLE- ★ D22 02686 D/03 ★FR 2451-806
Holder for baby's feeding bottles etc. in steriliser - provides full days supply of aseptic equipment in one batch
ALLEGRE E ETAB 20.03.79-FR-007708
P34 P62 Q31 (21.11.80) A611-02/06 B25d-25/10 B65b-55/06
20.03.79 as 007708 (10pp448)
A receptacle holds several baby's feeding bottles and their accessories in a sterilising vessel and comprises a horizontal plate which fits and locates inside the vessel. The plate has apertures and/or projections which positively locate the bottles, between these the plate has locating structures, e.g. apertures and/or projections, for bottle caps, teats, bottle covers etc.. The plate has holes into which the bottles enter coaxially to rest in an open-work cage structure beneath the plate. The plate pref. also has a raised flange all around its edge and the flange is profiled to engage circumferential arcs of bottle covers.
Sterilising baby's feeding bottles and accessories such as teats, bottle caps and bottle covers.

PORA/ D22 18106 A/10 =GB 1582-669
Dressing for wound - comprises elastic bandage with attached pad and with clip at one end of bandage (NL 28.2.78)
PORAT M 24.08.76-IL-050350
*P34 + P32 (14.01.81) *DE2738-028 A61f-13*
24.08.77 as 035491 (4pp1376)
Elastic bandage has an attached pad and at least one clasp end. The pad is a swab, sponge or compress of gauze a absorbent filler. Each clasp is a hook or Velcro strip.
Pref. the pad is attached by adhesive, sewing, rivetting or in a pocket in the bandage. Bandage can be securely applied w inherent problems of using an adhesive.

WELL- D22 84665 Y/48 =GB 15
Deodorising compsns. for chemical smells - contg. an antiox and an aliphatic hydroxycarboxylic acid dispersed in an medium
WELLINGTON CHEM IND 21.05.76-US-688813
*E19 P34 (14.01.81) *BE-854-887 + A01n-25*
18.05.77 as 020880 (14pp974)
The odour of an inherently odoriferous material is reduce admixing with it an antiodorant compsn. comprising an antiox (I) and an aliphatic hydroxycarboxylic acid (II).
(I) is a substd. phenol which is capable of retarding rancid natural fats and oils. (II) is X.O.CR':R.CO.Y, X.O.CR.(X.O.C(R')m(R)n.CO.Y or X.O.C(R')2.R.CO.Y. In the formulae an opt. substd. aliphatic gp.; R' is H or opt. substd. aliphatic gp. 1 or 2; n is 2-m; O.X is OH, ether or ester and CO.Y is a carbo acid, thioacid, ester, thioester or amide.
Pref. the antiodorant compsn. is dispersedin an aq. medium.

SLIV ★ D22 02721 D/03 ★GB 15
(Phenoxy-alkyl)-methyl-di:alkyl-ammonium salts - usefu bactericides and germicides etc. with reduced foaming propert
PROD PURS COURCELLE SA 15.09.77-GB-038599
E14 (14.01.81) A01n-33/12 C07c-93/14
31.05.78 as ------ (8pp478)
Quat. NH4 cpds. (I) are new. In (I) R1R2 is 6-10C alkyl; R3 is (CH2 (CH2)m-O-(CH2)m; n is 1-3; m is 1 or 2; R4 is H or substit; z is 1-5 anion.
(I) have bactericidal, bacteriostatic, and/or other germis props. (against algae, moulds, yeasts, and viruses, etc.). V dissolved in the appropriate solvent at use-rate concns., (I) significantly reduced foaming props., while some cpds. hav effect on beer foam when used for disinfecting brewing equipme



(I)

SQUI D22 10351 T/07 =NL-16
Enzyme-inhibiting peptides - useful as hypotensives
SQUIBB E R & SONS INC 28.07.70-US-058686
*B04 E16 P34 (E13) (15.12.80) *NL7108-452 A61k-37/02 C07c-10*
18.06.71 as 008452 (8pp279)
Pharmaceutical prepns. contg. a nona- or decapeptide of form Pyr-X-Trp-Pro-Y-Z-Ile-Pro-Pro OH (I) are new. In (I), X asparagine, serine or norleucine (or is absent in the case of a n peptide); Y is arginine, histidine, lysine or glycine; Z is aspara or glutamine; whereby the carboxyl is end-position and/or amin other functional gps. present may be protected.
(I) inhibit the conversion of angiotensin I to angiotension II have anti-hypertensive activity.

ICIL D22 49791 Y/28 =NL-16
(2)-Cyohexenyl/cyclohexanone prepn. - by crotonisation cyclohexanone in the liq. phase with a metal cpd. catalyst
IMPERIAL CHEM INDS LTD 28.02.77-NL-002119 (15.03.68 012646)
*C03 E14 (15.12.80) *NL7702-119 C07c-49/65 + C07c-37/07 (39/15 C07c-45/74*
28.02.77 as 002119 (4pp279)
2-(1-Cyclohexenyl)-cyclohexanone (I) is prepd. by cata crotonisation in the liq. phase of cyclohexanone at 50-250 deg.C i presence of sufficient Fe, Co or Ni cpd. to give 1 mole. metal/ cyclohexanone. The metal cpd. may be a salt of a max. 20C alip carboxylic acid, a naphthenic acid, an alcoholate derived from 6C alkanol, or an organic complex of the metal with a 1,3-diketo EDTA.
In a pref. embodiment (I) is dehydrogenated in known way prepare o-phenylphenol. The new process has greater selecti than known methods and does not form dicyclohexyli cyclohexanone.

URAL= ★ D22 03319 D/03 ★SU-7
Bathroom and toilet deodorant compsn. - contg. naphtha isoamyl acetate, glycerol, paraffin wax, scent and kieselguhr
URAL CHEM IND RES 05.07.77-SU-503789
*E19 P34 (25.05.80) A611-09/**
05.07.77 as 503789 (2pp938)
Bathrooms and toilets can be deodorised by the use of vo deodorant-contg. material in a form of tablets. The deod contains (in wt.%): naphthalene 19.5-20.5; isoamyl acetate

5-5; paraffin wax 35-40; scent 1-1.5 and kieselguhr the rest. matic and deodorising characteristics of the prod. are by the addn. of glycerol and paraffin wax. The prod. is and has fresh aroma and uniform deodorant release. Each up to 2 months. Bul.18/15.5.80

D22 03478 D/03 ★US 4241-463

ead and neck prosthesis - with spherical metal head with ne or polypropylene bearing insert

SION CAST SPEC 16.10.78-US-951883

2 (30.12.80) A61f-01/03

951883 (6pp958)

hesis is for use in replacing the end of a hip joint. The ent includes a spherical head for insertion into a natural earing insert in the head locked place by an inwardly split ring in the head and a groove in the insert.

haped member is seated in the insert and has a neck and a mounting the joint on the end of the femur on which the ball replaced. A ring has a downwardly and inwardly sloping l seating in a recess in the plastics insert and locking the ed member in the insert.

D22 03601 D/03 ★US 4242-242

absorbent cellulosic fibre - contg. 2-acrylamido-2-ropane sulphonic acid polymer used in diapers, tampons ical sponges

NA INC 10.06.77-US-805361

01 (A96) (30.12.80) C08l-01/02

as 805361 (10pp966)

absorbent cellulosic fibre contains, in admixt. with the , at least 2 wt.% (on cellulose) of a homopolymer of 2- ido-2-methylpropane sulphonic acid monomers or partial or e alkali metal or ammonium salts or copolymer of the rs or salts in amt. of at least 10, pref. 10-90 wt.% and one or drophilic comonomers.

enerated cellulose fibre of improved fluid absorbancy is spinning a viscose soln. contg. cellulose and the above r copolymer. Diapers, tampons, sanitary napkins, medical , soil mulches and wiping cloths may be formed.

D22 03621 D/03 ★US 4242-291

itution of tropocollagen to collagen fibrils - by pptn. from ier reduced gravitational fields

TELLE DEV CORP 09.05.79-US-037551

A96) (30.12.80) B29d-11 C07g-07

as 037551 (5pp478)

wn prepn. of a homogeneous gel matrix of unique collagen (I) y pptn. from a soln. of solubilised (I) mols is improved by g the pptn. under a gravitational force less than 1 g.

of (I) under a reduced gravitational field affords aggregated ls of a more uniform density. Thus artificial corneas and lenses formed by the process are expected to show much d optical uniformity. In addn., lens blanks can be formed ally or in sheets which can be shaped later.

★ D22 03628 D/03 ★US 4242-304

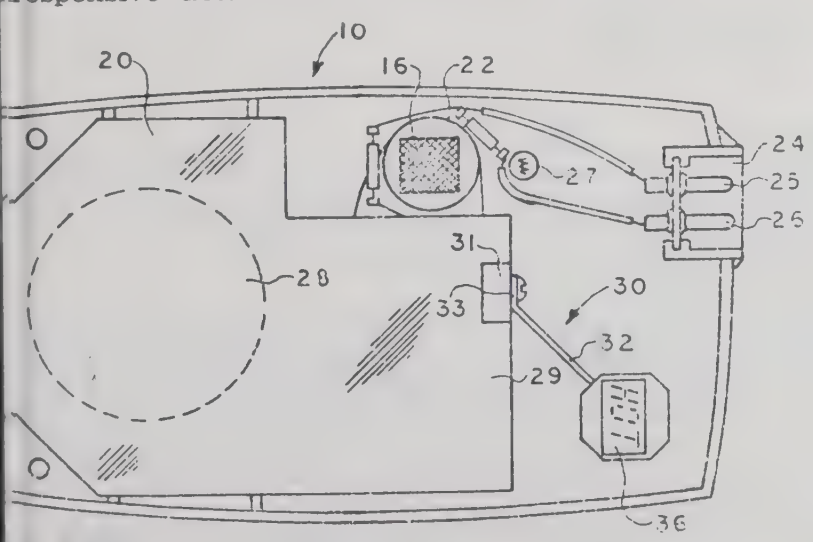
ctor for contact lenses - with visual indication of internal ermitting lens handling

DER INT CORP 22.06.79-US-051123

P14 (S03 S05) (30.12.80) A011-02/10 G01d-11/26 G01k-05/62

as 051123 (6pp1358)

fector has a housing with a heater and a visual indicator to hether a case holding the lenses is sufficiently cool to handle. licator includes an opaque window with longitudinal and rse transparent areas defining segmented characters, and a ith opaque and coloured regions corresponding to the areas window The plate is slidable diagonally below the window by a responsive actuator so that plate and window may be misaligned to show an opaque surface, or aligned to show a coloured message. The actuator is pref. a bimetallic strip connected between heater and plate, and the plate moves in a guide track.



BART ★ D22 03631 D/03 ★US 4242-310

Tube to medical soln. container sterile connector - has openable glove box with tube ends inserted for sterilisation

BAXTER TRAVENOL LAB 13.11.78-US-959610

P34 (30.12.80) A61l-02

13.11.78 as 959610 (5pp1358)

A connector for linking a tube to a container transfer tube includes a housing formed by interfitting base and cover having edge grooves for receiving and holding the two tubes. The tube sections inside the housing can be sterilised, and one section can be manipulated from the outside relative to the other so that the tubes can be connected or disconnected.

The base and cover are pref. hinged together and can be locked in the closed position during tube manipulation, e.g. with a glove sealed into a housing opening. The glove is also used for sterilisation with e.g. a spray can of Betadine or H2O2 in the housing. The housing is pref. of transparent plastics. The connector is for use e.g. in ambulatory peritoneal dialysis or blood admin.

MIDD/ ★ D22 03632 D/03 ★US 4242-311

Spray system for garbage container - has nozzle on front loading vehicle insertable through container door

MIDDAUGH R E 08.03.79-US-018498

P34 P43 (30.12.80) A61l-02/18 A61l-11 B08b-03/10 B08b-09

08.03.79 as 018498 (5pp1358)

A system for introducing insecticide and/or odour suppressant into a front-loading waste transporting vehicle receiving container comprises a nozzle assembly on a cross-car between front dumping forks and controllable from within the cab. The container has a spray access door in an end wall which is adjacent the assembly when the forks engage pickup sleeves on the container.

The assembly can be inserted through the door and then retracted after spraying so that a container can be sprayed after its contents have been tipped into the vehicle and before it is released from the forks. The door is pref. biased to a closed position. There is pref. a fluid pressure system for inserting and retracting the nozzle, which is formed on the end of a piston rod.

NISY D22 22604 C/13 = US 4242-336

Synergistic antibiotic and antifungal compsn. - contains dehydro acetic acid, its salt, sorbic acid and/or its salt and 2-pyridine thiol-1-oxide or its salt

NIPPON GOHSEI KAGAK 02.08.78-JP-094785 (31.07.78-JP-093878)

*A60 B03 C02 (D21) (30.12.80) *J55020-753 A01n-43/02 + A01n-55/02*

18.07.79 as 058446 (10pp954)

Antibacterial and antifungal compsn.(I) comprises a mixt. of (A) at least one of dehydroacetic acid and its alkali metal salts in an amt. of 60-95 wt.% (w.r.t. total wt. of (I)); and (B) tetrahydro-3, 5-dimethyl-2H-1,3,5-thiadiazine-2-thione in a synergistically effective amt. of 0.5-40 wt.% (pref.5-40 wt.%).

(I) can be used in industrial and agricultural prods. e.g. paints, sizing agents, petroleum prods., plastic mouldings, fruits, grains, vegetables, etc. (I) are of low toxicity.

ABBO ★ D22 03707 D/03 ★US 4242-503

O-Demethylation of fortimicin antibiotics - by hydrolysis with hydroiodic acid or tri:methyl silyl iodide

ABBOTT LABORATORIES 29.03.79-US-025237

B03 C02 E13 (30.12.80) C07h-15/22

29.03.79 as 025237 (3pp367)

Prepn. of 3-O-demethyl-fortimicins (I) is carried out by hydrolysing the corresp. fortimicins (II) with HI or trimethylsilyl iodide (TMSI). The reaction is started at room temp., the temp. is gradually raised to 50-70 deg.C over 0.5-4 hrs, and the mixt. is then kept at this temp. until hydrolysis is complete.

(I) are useful as antibiotics or intermediates for fortimicin derivs. (see also US4124756). The process gives improved yields (e.g. 10-30%).

See Also

D13 J5 5145613

D23: OILS; FATS; WAXES

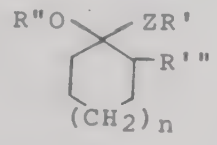
NISC ★ D23 02272 D/03 ★DE 3022-296
Cis-trans isomerisation of beta, gamma-unsatd. cpds. - using mercaptan as catalyst (NL 16.12.80)
NISSAN CHEM IND KK 02.11.79-JP-142421 (14.06.79-JP-074936)
E17 (08.01.81) B01j-31/02 C07c-29/56 C07c-33/02 C07c-67/29 C07c-69
13.06.80 as 022296 (2.11.79-JP-142419) (19pp367)
Conversion of the cis isomers of beta, gamma-unsatd. alcohols or esters of formula R1R2C:CH-CH2-OX (where R1 is H or 1-5C alkyl; R2 is an opt. OH-substd. hydrocarbon radical; X is H or COR3; R3 is H or a hydrocarbon radical) to the corresp. trans isomers is effected by isomerisation in the presence of a mercaptan catalyst.

Suitable catalysts include aryl mercaptans, alkanedithiols, mercaptoethanol and (cyclo)alkyl mercaptans. Dialkyl disulphides can also be used as catalysts. The reaction is pref. effected in the presence of a radical initiator in an inert gas atmos.

The process can be used to prepare the trans isomers of hydroxynerol, nerol, farnesol, phytol, crotyl alcohol and their esters. The reaction proceeds at a high rate without significant double-bond displacement. By-produced aldehydes (e.g. citral and citronellal) are useful for perfume mfr.

GIVA D23 33725 T/21 =DS 2155-671
Carbocyclic odourants - giving intensity and consistency to perfumes
GIVAUDAN L & CIE SA 10.11.70-US-088494
*E15 (08.01.81) *BE-775-152 C07c-35/02*
09.11.71 as 155671 (12pp68)
New cpds. useful as perfumes are of formula (I) (where R' is H or methyl; R is H or lower alkanoyl; R' is normal-, sec- or iso-butyl; Z is -CC-, -CHCH- or -CH2-CH2- and n is 0, 1 or 2), pref. 1-acetoxy-2-sec-butyl-1-ethynyl cyclohexane.

(I) may be prepd. by reacting the corresp. 2-butyl-cycloalkanone with an organometallic cpd. MZR' (M is alkali metal in which case Z is -CC- or MgX where X is halogen) opt. followed by hydrogenation and/or converting to the methyl ether.(OS)



HARB- D23 07312 V/05 =DS 2248-921
Converting and protecting edible oil sterols - by transesterifying with fatty acid esters
HARBURGER OELWERK B (HARB) 05.10.72-DE-248921
*(08.01.81) *BE-804-687 A23d-05 C07j-09 C11c-03/10*
05.10.72 as 248921 (5pp68)
Vegetable and animal fats and oils contg. sterols with free OH gps., so-called free sterols are interesterified with 1.0-1.1 equivs. of a fatty acid ester of a 1-4C alkanol (based on content of free sterol). Reaction is conducted in homogeneous phase at high temp. in the presence of a catalyst of alkali alcoholate or alkali metal and the 1-4C alcohol formed by the reaction is removed.

After interesterification, the fats and oils can be hydrogenated and used to make margarine, salad oil etc., without the formation of undesirable by-prods. from the sterols present.(DS)

UNIL ★ D23 02392 D/03 ★EP --21-527
Selective hydrogenation of unsatd. fatty acids - over Gp/VIII catalyst treated with ethylene di:amine, to inhibit satd. or trans-isomer prodn.
UNILEVER NV 19.06.79-NL-004782
E17 (07.01.81) B01j-31/28 C11c-03/12
18.06.80 as 200576 (16pp478) (E) BE-872476 BE-872477 BE-851202
1.Jnl.Ref E(AT BE CH DE FR GB IT LI NL SE)
Unsatd. fatty acids (I) with 2 or more double bonds are selectively hydrogenated at -20 to +100 deg. C over platinum, palladium and/or rhodium opt. contg. as promoter a metal of the same or another Gp. The Gp. VIII metal has been treated with ethylenediamine (II) or a homologue and/or deriv. in a molar ratio of no. of nitrogen atoms to Gp. VIII metal of at least 100 : 1..

The process allows the selective hydrogenation of (I) (esp. edible triglycerides) without formation of satd. fatty acids, and with minimal formation of trans-isomers. Tbus linolenic acids are hydrogenated to give prods. with higb linoleic acid contents (at least 75%, esp. above 90% of original amt.).

UNIL ★ D23 02393 D/03 ★E
Selective hydrogenation of unsatd. fatty acids - over catalyst treated with ammonia, to inhibit satd. or tran prodn.
UNILEVER NV 19.06.79-NL-004781
E17 (07.01.81) B01j-23/40 C11c-03/12
18.06.80 as 200577 (17pp478) (E) BE-872476 GB2019309 BE-8512
BE CH DE FR GB IT LI NL SE)
Unsatd. fatty acids (I) contg. 2 or more double bonds are sel hydrogenated at -20 to +100 deg. C over palladium, pl rhodium or iridium, opt. contg., as promoter, a metal of the another Gp. The Gp. VIII metal has been treated with dry a in molar ratio of ammonia to Gp. VIII metal of at least 100 : 1.

Process allows the selective hydrogenation of (I) (esp. triglycerides) without formation of satd. fatty acids, a minimal formation of trans-isomers. Thus linolenic ac hydrogenated to give prods. with high linoleic acid contents (75%, esp. above 90% of original amt.).

SUMO ★ D23 02514 D/03 ★EP
Prodn. of rose oxide from citronellol - by anodic alkox complex-catalysed dealkoxylation and cyclisation
SUMITOMO CHEMICAL KK 20.06.79-JP-078602 (19.06 077919)
E13 (07.01.81) C07c-29 C07c-33/02 C07c-43/17 C07d-309/0 03/02
16.06.80 as 302027 (20pp367) (E) DS1493699 DS1793079 3.Jnl.Re DE FR GB IT LI NL)
Prepn. of 2-(2-methyl-1-propenyl) 4-methyl tetrahydropyr comprises (a) anodic alkoxylating citronellol (II) in an alcoho presence of an alkali metal aromatic sulphonate as supp electrolyte; (b) dealkoxylating the resulting 2,6-dimethyl-3-all octen-8-ol (III) in an alcohol solvent in the presence of a pallad nickel complex and a base; and (c) cyclising the resulti dimetbyl-1,3-octadien-8-ol (IV) in the presence of an acid.

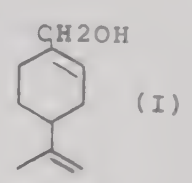
Steps (a) and (b) are also claimed independently as new proc (I) is useful as a perfume ingredient (rose oxide).

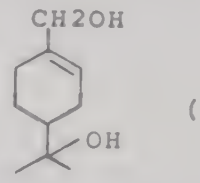
The process gives high yields, e.g. 34.3-56.4% in step (a), 32.9 in step (b) and 98.5% in step (c), the product having a high cis ratio.

SYNA- ★ D23 02591 D/03 ★EP
Perillyl alcohol and 7,8-di:hydroxy para-menthene 1 prepn. beta-pinene epoxide and aq. suspension of mercuric salt, prods. useful as perfumes
SYNAROME-H FRAYSSE 19.06.79-FR-015676
E15 (07.01.81) C07c-29/48 C07c-33/14 C07c-47/46 C07c-67/0 69 C11b-09
11.06.80 as 400846 (9pp597) (F) FR1183849 FR2232533 J650201 981695 5.Jnl.Ref E(CH DE GB IT LI NL)
Prepn. of perillyl alcohol (I) comprises reacting beta-pinene e with an aq. suspension of a mercuric salt. The organic phase extracted and treated with a mineral acid.

7,8-Dihydroxy-p-menthene-1 (II) is prepd. by the same p except that the mineral acid treatment is omitted..

Both cpds. are used as perfumes. (I) is currently us cosmetics, soaps and perfumery prods. The process is operated, economical and gives quantitative yields.



(I)


(II)

CHMA- D23 57157 A/32 =GB 15
Nitrated musk perfume compsns. - contg. modifying agent sugars to improve stability without affecting solubility or odour
SOC PROD CHIM MAT 31.01.77-FR-002663
*(D25) (14.01.81) *DE2803-691 A61k-07/46*
19.01.78 as 002209 (4pp393)
Nitrated synthetic musk compsn. contains 0.5-50 wt.% (or compsn.) of a modifying agent which is a solid non-film former least partially soluble in a 1-8C alcohol, is odourless and is n toxic or an irritant to human tissues which it contacts.

Pref. the agent is maltose, saccharose, glucose, lactose, sucr their ethers or esters or is pentaerythritol or mannitol. The mu pref. musk xylene, musk ambrette, musk ketone, musk tibeto musk mostene.

The compsn. is stable and may be easily formulated within a of perfumery, a detergent or a washing material.

D23 03129 D/03 ★J5 5145-789
fats without soapy flavour prepn. - by adding viscous es to oils and fats contg. lower aliphatic acids
HIN OIL MILLS KK 02.05.79-JP-053360
(13.11.80) A23d-05 C09k-15/34
as 053360 (5pp90)
of oils and fats which are prevented from having a soapy comprises adding viscous substances (I) to oils and fats ower aliphatic acid. (I) are prepd. by extracting (a) distn. of rice bran dark oil and/or (b) alkali oil tailing of rice bran neutral or alkaline monohydric lower alcohol; by acidifying act and then isolating (I).
the amt. of (I) added is 0.01-1% based on that of oils and fats

ethod enlarges the use of oils and fats contg. lower aliphatic

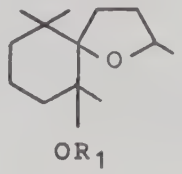
D23 17120 C/10 = J8 0050-024
e cpds. prepn. from diol and di:amine - by gas phase reaction atalyst contg. zinc and magnesium, cerium, manganese, lladium, lead, phosphorus and/or boron
KAI DENKA KOGYO 05.04.78-JP-039143
*C02 E13 (16.12.80) *J54132-588 B01j-23/06 C07d-241/12 01j-27/14*
as 039143 (4pp69)
of pyrazines comprises subjecting diol of formula HO-CHR-OH and diamine of formula H2N-CHR3-CHR4-NH2 (where nd R3 and R4 each is H or hydrocarbon to gas phase catalytic n in the presence of catalyst contg. (a) zinc and (b) sium, cerium, manganese, iron, palladium, lead, phosphorus boron.
zines are useful as perfume and also in the prodn. of aceuticals or agricultural chemicals. Pyrazines may be ed easily in high purity in high yield with little yield of uct, and long life of catalyst. (J54132588).

D23 57230 C/33 = J8 0050-058
on cpd. of cyclodextrin and perfume - which is chemically and lly stable and can be blended with resin and moulded into ed goods
DSHIN KK 15.12.78-JP-154133
*(A17) (16.12.80) *EP--13-688 C08k-09/12*
as 154133 (2pp914)
usion cpd. of cyclodextrin and a perfumery prod. is new. A ic resin prod. formed by moulding a mixt. of the above on cpd. and a thermoplastic synthetic resin is also new.
the resin is polyethylene, and the resin prod. is made by unding a perfumery product with cyclodextrin, dry-ing the mixt, blending it with the resin, and moulding the

odextrin inclusion of the perfumery product gives a cpd. improved chemical and tbermal stability so tbat it can nd moulding temps. (260-270 deg.C). Thus a perfume-contg. noulding can be formed which can emit a perfume over a long of time without change in the perfume. (J55094945).

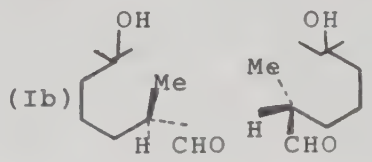
D23 16427 W/10 = NL-165-782
ag edible glyceride-base oil by contact with adsorbent - to re colour and storage stability
ILEVER NV 24.08.73-GB-040150
*12.80) *DE2440-111 C11b-03/10*
as 011190 (8pp279)
glyceride oils (I) in soln. in non-polar solvent are led through a n contg. a metal- or metalloid-oxide as adsorbent. The solvent oved and the treated oil is then contacted with a bleaching earth. Pref. the treated oil is further subjected to a deodorising treatment with steam.
The new process improves the colour and the storage properties of (I) so that no unpleasant taste develops. The process is esp. favourable for palmoil, soyaoil and grapepip oil. Adsorbents used are esp. kieselgel and Al203.

FIRM D23 55957 W/34 = NL-165-783
1-Oxa-spiro-(4,5)-decane-6-ol and its esters - as perfumes and for modifying taste and aroma of foods, pharmaceuticals, tobacco etc.
FIRMENICH SA 07.06.74-CH-007776 (04.02.74-CH-001488)
*B03 C02 E15 + P15 (D16 D18 D21) (15.12.80) *DE2504-618 A23l-01/22 C07d-307/94 C11b-09*
23.01.75 as 000788 (14pp913)
Organoleptic properties of perfumes. or perfumed prods. feedstuffs, food, drinks, pharmaceutical prepns. and tobacco prods. are improved, enhanced or modified by including spiran derivs. (I) (where R1 is H or 1-6C acyl). Use of solns. of (I) (where R1 is H) in conventional solvents is specifically excluded.
Cpds. (I) generally have woody notes, and their ester derivs., depending on the alcohols, have amber, balsam, flowery and even spicy notes.



(I)

INFL ★ D23 03617 D/03 ★US 4242-281
Prepn. of 6-hydroxy-2,6-di:methyl-heptanal - from 2,6-di:methyl-5-heptenal, by hydration of the sulphite addn. salt
INT FLAVORS & FRAGR INC 26.10.79-US-088519 (17.11.78-US-961685)
E17 (D13) (30.12.80) C07c-47/19
26.10.79 as 088519 (27.6.79-US-052355) (22pp478)
6-Hydroxy-2,6-dimethylheptanal (Me2C(OH)(CH2)3CH(Me)CHO (I)a; including the d- and l-isomers (I)b and (I)c) is prepd. as follows: (a) 2,6-dimethyl-5-heptenal (II) is emulsified with H2O using an alkali metal salt of a long chain fatty acid; (b) emulsified (II) is treated with Na2SO3 in the presence of H3BO3 at 10-50 deg.C with mol. ratio Na2SO3; (II) is 1-10:1; and (c) the resulting sulphite-aldehyde addn. salt (III) of (II) is hydrolysed with 10-50% HCl at 0-50 deg.C with mol. ratio HCl:(III) is 0.5-1.5;1.
In step (b) the Na2SO3 concn. is 0.1-3 M, and the (II) concn. is 0.5-2 M. (I) is useful for augmenting or enhancing the aroma or taste of foodstuffs, tobaccos, and perfumes, etc. In partic. (I) provides a sweet, green, melon-like, tropical fruit-like, seedy and raspberry aroma and/or flavour to a range of foodstuffs.



See Also
D13 US 4242269 D14 EP -21507

D24: SOAP; SOAP DETERGENTS

NOTHING TO REPORT

D25: OTHER DETERGENTS

★ D25 02022 D/03 ★BE-883-947
. detergent compsn. with active phosphate additive system - under extreme conditions with higher phosphate content
ILEVER NV 09.11.79-GB-038987 (21.06.79-GB-021744)
(E34) (22.12.80) C11d
0 as 883947 (18pp597)
mpsn. comprises (a) 2-20% of one or more synthetic detergent (b) 2-13% of sodium tripolyphosphate, (c) 2-16% of otassium pyraphosphate, (d) 0.1-8% of an 8-22C alkali metal (e) 0.1-2% of mono-, di- or tri-ethanolamine or isopropanalamine, (f) 1-15% of a hydrotrope and (g) 40-75% of water.
The compsns. have a bleaching and detergent power equal to a washing powder contg. 17% perborate. Unlike previously proposed compsns., the above are stable under extreme conditions, do not require the presence of a stabilising polymer, and can contain a larger amt. of phosphates.

SANO ★ D25 02023 D/03 ★BE -883-952
Detergent compsns. pref. in paste form - contain polyether poly:ol and alkanolamine nonionic surfactants for cleaning stained surfaces and the hands
SANDOZ SA 27.06.79-CH-005998
A97 E19 (D21) (23.12.80) C11d
23.06.80 as 883952 (10pp597)
The compsns. contain per 100 pts. by weight:- (A) 0.1-5 pt. of a thickening agent resistant to metals and alkalis (B) 2-20 pts. of a mixt. comprising 3-15 pts. of 5-25 times ethoxylated (8-24C alkyl)-phenol, 5-15 pts. of an alkanolamine, 2-8 pts. of a complexing agent and 1-3 pts. of a sequenced copolymer of propylene oxide and ethylene oxide of M.W. 1500-2,500 and having 5-15% ethoxy units at the end of the chain, (C) 10-60 pts. of a finely divided clay of hardness 2-3 degr. (D) 0-20 pts. of fatty glycerol monoester, (E) 0-1 pt. of perfume, (F) 0-5 pts. of an alkali resistant scrap colourant, (G) 20-80 pts. of demineralised water or water mixed with one or more of alcohols, ketones, glycols, glycol ethers, polyglycol ethers of 1-4C alkylene oxides, aromatic and alicyclic hydrocarbons and chlorohydrocarbons.
The compsns. in the form of powder cream or pref. paste which are stable to storage. They can be used for cleaning surfaces and metal or glass appts. They are effective in removing colourant, fat, oily residue, graphite, etc.

KARO/ ★ D25 02112 D/03 ★DE 2925-137
Granular detergent compsns. - contg. specified amts. of tri:poly:phosphate, water and other ingredients
KAROLY K 22.06.79-DE-925137
E34 (08.01.81) C11d-03/06
22.06.79 as 925137 (14pp367)
Homogeneous, non-dusting, free-running granular prods. comprise (A) 25-80% pentasodium tripolyphosphate (I), 6-25% H2O and 0.01-25% Na2SO4 and/or 10-50% Na perborate, and opt. 2-15% detergent and up to 15% detergent additives (e.g. silicates, CMC and EDTA), or (B) 20-60% (I), 20-60% Na metasilicate or other silicates, 1-5% detergent, 7-20% H2O and opt. 0.01-10% Na2CO3.
Prods. (A) are useful as (components of) textile detergents and prods. (B) are useful as dishwashing tergents. The prods. have better handling properties than conventional spray-dried powders and can be produced at lower temps. in a high-shear mixer.

FARB ★ D25 02178 D/03 ★DE 2926-413
Bleaching liq. with low sodium chloride content - made by melting crystals of sodium hypochlorite obtd. sub-zero cooling of soln with high sodium chloride content
BAYER AG 29.06.79-DE-926413
E34 (08.01.81) C01b-11/04 D06l-03/06
29.06.79 as 926413 (10pp1144)
Liq. contg. NaClO, the Na salts of weak acids, and a high % of NaCl, is cooled to below -10 deg.C so NaClO crystallises out of the soln. The crystals are sepd., and are then melted to yield a liq. with a high content of NaClO but a low content of NaCl.
Pref. initial liq. (I) contains ca 131 g/l NaCl and 166 g/l NaClO, to which 5-30 g/l of Na2CO3, NaHCO3, and/or Na4P207 is added, followed by crystallisation at -18 to -25 deg.C., possibly with the aid of seed crystals of NaClO. The crystals obtd. are pref. melted in three fractions at (1) -15 to -12 deg.C; (2) -12 to 0 deg.C; and (3) 0 to +18 deg.C.
Bleaching liq. is made by adding Cl2 to NaOH lye so Cl2 and 2NaOH form NaClO, NaCl and H2O; or by the electrolysis of NaCl soln. Liq. (I) is used to form crystals melted to produce a liq. (II) contg. e.g. 260 g/l NaClO and only 90 g/l NaCl. Water can then be added to liq. (II) to make the usual household bleach contg. 52 g/l NaClO and 18 g/l NaCl.

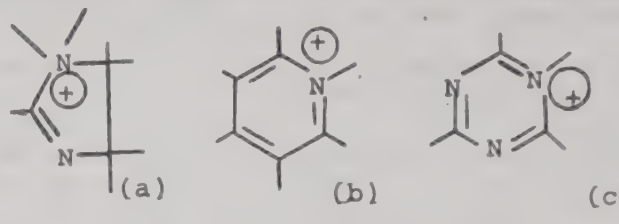
POLY- ★ D25 02250 D/03 ★DE 3021-034
Contact lens cleaning compsns. - contg. surfactant, polishing agent and suspending agent
POLYMER TECHN CORP 25.06.79-US-051960
A96 E19 P81 (08.01.81) G02c-13
03.06.80 as 021034 (20pp367)
Compsns. for cleaning contact lenses comprise a surfactant, an inorganic polishing agent, a carrier (pref. water), and a suspending agent (pref. an inorganic salt or hydrophilic polymer) capable of maintaining the surfactant and polishing agent in homogenous suspension.
Also claimed is a process for cleaning contact lenses by applying a soln. contg. a polishing agent and a surfactant to the surface of the lens and removing any undesirable deposits without altering the thickness of the lens.
Incorporation of the polishing agent increases the ability of the compsns. to remove deposits and superficial scratches esp. from silicone-contg. plastic lenses, without damaging the lens.

PROC ★ D25 02375 D/03 ★EP -
Low phosphate detergent compsns. with high soil removal - cationic and nonionic surfactants and poly:carboxylate aluminosilicate builders
PROCTER & GAMBLE CO 18.06.79-US-049704
E19 (E33) (07.01.81) C11d-01/83 C11d-03/12
09.06.80 as 200524 (49pp478) (E) EP----595 EP----235 EP----234 DE FR GB IT NL)
Detergent compsn. contg. 0-5% phosphate cpds. consists of (a) of a surfactant mixt. of (i) a nonionic surfactant (I) of HLB 5-1 (ii) a cationic surfactant of formula (II) (ratio (I) to (II) is 1-100:1 (b) 5-99% of a detergency builder mixt. contg. (i) a water-aluminosilicate (III), and (ii) a polycarboxylate builder (IV) (wt. (III) or (IV) is 1-10:10-1).

(R1)m(R2)x(Y)lZ (II)

(each R1 is opt. branched 8-22C alkyl or alkenyl, (i) opt. subst 1-3 phenyl or hydroxy gps., (ii) opt. interrupted by 1-4 pheny COO, OCO, CON(R2), N(R2)CO, CONH, NHCO, O, OCOO, OC and/or NHCOO gps. and (iii) opt. contg. up to 20 ethylene oxide m is 1-3; R2 is 1-4C alkyl, 1-4C hydroxyalkyl or benzyl, not more one being benzyl; x is 0-11; Y is N(+), P(+), S(+), N(+)(C2H4C N(+)((C2H4O)p-H)2, N(+)((C2H4O)p-H)3 or a gp. of formula (a), ((c); l is 1 or 2; Y gps. are sepd. by 1-22C R1 and R2 analogues whe 2; Z is an anion).
(III) is (i) a zeolite A, X or P(B) or mixts. of particle dia. 0.(micron and contg. at least 10% water of hydration; or (ii amorphous hydrated cpd. (M)z.(zAlO2ySiO2) (where M is Na, NH4; z is 0.5-2; y is 1) of particle dia. less than 100 micron, Mg exchange capacity at least 50 mg equiv. of CaCO3 hardness/ anhydrous aluminosilicate, and Mg2+ exchange rate at lea grain/gallon/min./g/gallon..

Although the compsns. contain little or no phosphate, they h excellent particulate soil removal, and greasy/oily soil rem benefits, along with fabric softening, static control, and other fa care benefits. The compsns. are readily biodegradable.

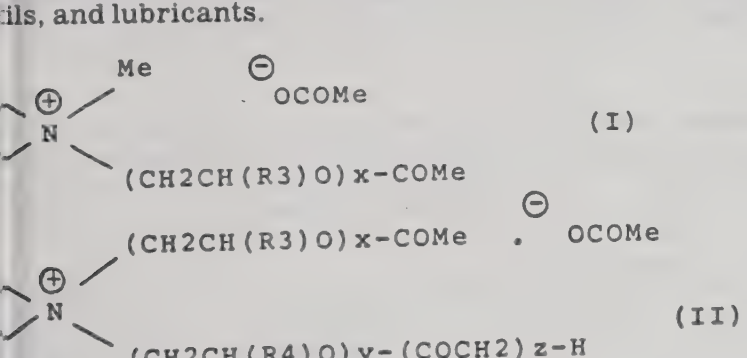


PROC ★ D25 02378 D/03 ★EP --21
Prepn. of mono:alkyl ether(s) of polyoxyalkylene glycol(s) - f polyoxyalkylene glycol(s), aq. metal hydroxide and organic halid
PROCTER & GAMBLE CO 21.06.79-US-050840
B05 E17 (07.01.81) C07c-41/16 C07c-43/13 C08g-65/32
10.06.80 as 200533 (18pp1248) (E) NO-CITNS. E(BE DE FR GB IT N
Prepn. of monoalkyl ethers of polyoxyalkylene glycols (I) compr first mixing a polyoxyethylene glycol, polyoxypropylene glycol mixed polyoxyethylene-polyoxypropylene glycol with a concd. metal hydroxide soln., then adding an organic halide, with a n ratio of glycol to halide greater than 2:1 and a molar rati hydroxide to halide greater than 1:1..
Cpds. (I) are obtd. in high yields and have good purity, and they obtd. with homogeneous chain lengths without use of extrane organic solvents or phase transfer catalysts, so that their isola and recovery are simplified. (I) include the spermicides describe US4067961, i.e. monodecyl tetraoxyethylene glycol and monod pentaoxyethylene glycol, and the ethers described in GB146213 useful in cleaning organic hydrophobic soils from synthetic fabri

INTE- ★ D25 02379 D/03 ★EP --21
Stabilising peroxy cpd. particles used in detergents - by trea with hydroxy-carboxylated polymers on their salts
INTEROX SA 21.06.79-FR-016344
A97 (07.01.81) C01b-15/05
10.06.80 as 200534 (37pp950) (F) FR2255255 DE2723563 DS102 FR2169273 DS1240508 FR2386477 DE2622610 FR2215385 E(AT BE DE FR GB IT LI LU NL SE)
Peroxy cpds. particles are stabilised by hydroxycarboxyla polymers contg. monomeric units of formula (CR1R2-C(OH)(COO where R1 and R2 are H or 1-3C alkyl and M is H, or an alkal earth) metal. Pref. M is H or alkaline earth metal and R1 and R2 H (prefd.) or Me. Amt. of stabiliser used is pref. 0.01-5 wt.%. particles are pref. coated with an inorganic coating agent..
The polymers are partic. for stabilising alkali metal persalt normally low stability esp. Na percarbonate. These persalts used as bleaching agents in detergents. The stabilised particles storage stable in humid atmospheres or in presence of other wash or bleaching powders. They have good resistance to attrition lump formation, good speed of dissolution in water, a low fi content and good flowability.

D25 02401 D/03 ★EP --21-545
ontg. liq. detergent compsns. - contg. also anionic and nonionic surfactant, useful diluted for hand ng or undiluted
ER & GAMBLE CO 07.01.80-US-110148 (29.06.79-US-
2 Q33 (07.01.81) B65d-01/32 B65d-47/26 C11d-01/83 C11d-
s 200610 (28pp478) (E) DE2844399 EP---9942 US4129527 US3981421 FR2356719 DE2739776 EP---8805 E(BE DE FR
contg. liq. detergent contains (by wt.): (a) 15-50% of an urfactant (I); (b) 2-15% of a suds stabilizing nonionic t (II) (amine oxide, amide, or ethylene oxide condensate of l or alkylphenol); (c) 1-20% of water-insol. abrasive (III) of ia. 15-150 microns and Mohs hardness 2-7; and (d) 20-82%
mpsn. provides an initial suds cover to a dishwashing soln., s cover after the washing of 8 plates when used at 0.07% in 2 of 115 deg. F water contg. 7 grains/gallon hardness d as CaCO3, each plate carrying 4 ml..
mpsn. is not only highly effective in removing food soils henware when used undiluted or as a conc. slurry, but is ly acceptable for hand dishwashing in dil.water solns.

D25 02402 D/03 ★EP --21-546
monium acetate salts - useful as fabric softening agents, nts for antibiotics, hair conditioners, etc.
NV 02.07.79-US-054341
16 F06 (B07 D21) (07.01.81) C07c-93 C11d-01/62 D06m-13/46
s 200613 (13pp478) (E) NO-CITNS. E(BE DE FR GB IT NL)
di-(polyoxyalkylene-acetate) ammonium acetate salts of e (I) and (II) are new.
R2 are 8-22C aliphatic gps.; R3 and R4 are H or Me; R5 is H or phatic gp.; x and y are 1-20; z is 0 or 1)..
(II) possess increased liquidity and are useful as textile g agents, esp. those to be used as rainwear, etc. (the cpds. em more hydrophobic). The cpds. are also useful as nts and carriers for antibiotics; as combing aids and hair ners; in paper making as softeners, debonders, and c agents; as processing aids in foundries; as emulsifiers and n inhibitors in metal working; and in surface modified clays, ils, and lubricants.



★ D25 02418 D/03 ★EP --21-581
kened bleach compsns. - contg. alkali metal hypochlorite, factant blend of amine oxide and alkali metal alkyl sulphate
KITT & COLMAN PR 30.05.79-GB-018721
E12 E34) (07.01.81) C11d-01/75 C11d-03/39 D06l-03/08
as 301554 (21pp478) (E) US3876551 GB2003522 FR2355909 412 E(AT BE CH DE FR GB IT LI LU NL SE)
kened bleach compsns. contain an alkali metal hypochlorite l a surfactant blend of (a) one or more amine oxides BNO (II) and (b) an alkali metal alkyl sulphate R3OSO3M (III). R1 is opt. branched 10-18C alkyl; R2 is 1-3C alkyl; R3 is opt. ed 8-12C alkyl; M is Li, Na or K)..
ompsns. have good viscosity stability and phase stability on in a variety of climates, and are equally effective for use th hard and soft water.

★ D25 02450 D/03 ★EP --21-631
rpet cleaning and deodorising compsn. - contg. a hydrated borate, water-insol. hydrated metal alumino-silicate, and e
BORAX & CHEM CORP 05.06.79-US-045729
(E14) (07.01.81) C11d-03/12 D06l-01
as 301820 (9pp478) E(AT BE CH DE FR GB IT LI NL SE)
rpet cleaning and deodorising compsn. contains (by wt.): 85- . of one or more hydrated sodium borates (I), 0.2-15 pts. of one e water-insol. hydrated metal aluminosilicates (II) and 0.01-5 perfume..
psns. have improved flowability, and effectively absorb soil, moisture and spills from carpets and leave them g fresh and clean. Vacuum cleaners used to remove the dry l. are also deodorised.
l. compsns. contain (by wt.) 95-98% (I), 1-4% (II), 0.5-2% perfume, and pref. also 0.05-5% esp. 0.5-1% of a cationic quat. ammonium salt, optical dyes, and other dyes, etc.

JOHN- D25 86187 C/48 =EP --21-752
Aq. stable liq. detergent compsn. - contg. nonionic surfactant, quat. ammonium fabric softener, optical brightener, and hydrotrope
SC JOHNSON & SON 14.06.79-US-048411
A97 E19 (07.01.81) *US4233-167 C11d-01/83 C11d-03/42 D06m-13/46
13.06.80 as 302003 (23pp200) (E) US3959157 FR2295122 US3954675 EP---6271 E(AT BE CH DE FR GB IT LI LU NL SE)
Aq. liq. detergent compsn. for fabrics contains, by wt. w.r.t. total compsn., (a) 10-50% water-soluble nonionic surfactant system, (b) 0.75-6% of at least one quat. ammonium fabric softener having equiv. wt. 400-2000, (c) a 4,4'-bis(4-di-substd. amino-6-(sulpho-substd. anilino)-s-triazin-2-ylamino)-2,2'-stilbene disulphonic acid optical brightener, provided equiv. wt. ratio (b): (c) is 0.5:1 to 1:1, (d) sufficient hydrotrope to maintain stability and (e) an aq. solvent.

JOHS ★ D25 02527 D/03 ★EP --21-799
Concentrate compsns. for extraction cleaning of carpets - contg. low foaming cationic surface active agent as antifoam agent, surfactants, builders, etc.
JOHNSON S C & SONS INC 22.06.79-US-051095
E19 (07.01.81) C11d-01/83
19.06.80 as 302074 (25pp478) (E) DE2704507 EP---4121 DE2331661 FR2401988 E(AT BE CH DE FR GB IT LI LU NL SE)
Cleaning liq. or dry powder concentrate compsn. for extraction cleaning of carpets contains, apart from surfactants and builders, a low-foaming cationic surface active agent (I) as an antifoam agent.
Liq. concentrates contain (by wt.) 1-15% (I), 1-15% low-foaming nonionic surfactant (II), 1-15% builder (III), 1-10% chelating agent, and 96-55% water.
Dry powder concentrates contain (by wt.) 2-15% (I), 1-15% (II), and 70-97% (III)..
Compsns. contg. (I) as antifoam agent do not separate in the soln. feed tank, are very effective in the water extraction cleaning of carpets. They simultaneously clean carpets and control the foam caused by the residue contained in the carpet from previous cleanings with high-foaming anionic detergents.

UNIL ★ D25 02543 D/03 ★EP --21-830
Low sudsing detergent compsns. - contg. anionic sulphate surfactant and non-soap antifoam
UNILEVER LTD 27.06.79-GB-022438
E19 (07.01.81) C11d-01/02
25.06.80 as 302130 (18pp478) (E) DE2650971 US3010907 DE2544707 FR2288145 E(AT BE CH DE FR GB IT LI NL SE)
Detergent compsn. consists of one or more anionic sulphate surfactants (I), and a non-soap anti-foam (II). (I) has a calcium salt solubility prod. greater than 10 (power minus 12) mol cubed per l. cubed; and (b) a max. critical micelle concn. 0.06 g/l (both (a) and (b) measured at 60 deg. C)..
The low-sudsing compsns. do not need the presence of nonionic surfactants, and show equiv. detergency and suds control to conventional ternary prods. The use of environmentally unsatisfactory long-chain alkyl benzene sulphonates is avoided.

UNIC D25 84182 C/47 =EP --22-023
Zeolite agglomerate particles for detergent formulations - consisting of zeolite crystals in matrix of ethoxylated alcohol and sodium citrate, acts as a water softener in place of phosphate builders
UNION CARBIDE CORP 26.06.79-US-052190
(07.01.81) *US4231-887 C11d-03/12
25.06.80 as 400954 (14pp200) (E) DE2651420 FR2370691 DE2753026 DE2843390 E(BE DE FR GB IT NL)
Zeolite-contg. agglomerate particles consist of (a) 3-dimensional molecular sieve-type crystals contg. ion-exchangeable alkali metal cations, contained in an intimate matrix mixt. of (b) at least one ethoxylated alcohol having formula

R-O-(CH2CH2O)nH (I)

(where R is prim. or sec. 9-18C alkyl and n is integer 3-12) and (c) Na citrate. W.r.t. the zeolite crystals (hydrated), quantity of (I) is 15-50 (pref. 25) wt.% and quantity of Na citrate, as the dihydrate, is 8-25 (pref. 12) wt.%..
The agglomerates are used as additives for detergent formulations, esp. low phosphate or phosphate-free household laundry detergent compsns.

UNIC ★ D25 02614 D/03 ★EP --22-024
Zeolite-contg. agglomerate particles - for low phosphate detergent compsns. contg. zeolite in matrix of alkylbenzene of alkylbenzene sulphonate and polyethylene glycol
UNION CARBIDE CORP 26.06.79-US-052191
A97 E33 (E14) (07.01.81) C11d-03/12
25.06.80 as 400955 (6pp478) (E) DE2632352 DE2656009 DE2814083 DE2538679 DE2656251 E(BE DE FR GB IT NL)

Zeolite contg. agglomerate particles suitable for incorporation into detergent compsns. consist of crystals of a 3-D zeolite (I) (mol. sieve type contg. ion exchangeable alkali metal cations) contained in a matrix of an intimate mixt. of (all wt. pts.) 100 wt.pts. hydrated (I); (a) 10-25 pts. of a water soluble alkyl-benzene sulphonate (II) (9-15C alkyl), and (b) 2.5-6.5 pts. of a polyethylene glycol (III) of mol.wt. 3000-19,000, and freezing range 53-63 deg.C..

The (I)-contg. agglomerate when mixed with conventional laundry detergents remains uniformly distributed during packaging and shipping etc., and on contact with cold water it rapidly disperses to ensure even distribution. (I) is a known adjuvant for low phosphate detergents etc. as a sequestering agent.

FARH D25 82383 Y/46 = GB 1582-552

Cleaning agents for carpets, textiles, etc. - with porous polyolefin absorptive fibres to absorb stains and a surface active hydrophilic cpd.

HOECHST AG 27.04.76-DE-618278

*A97 (A17) (14.01.81) *NL7704-439 C11d-03/37*

27.04.77 as 017551 (4pp918)

Cleaning of a surface is effected by applying a cleaning material contg. polyolefin fibrids (I) of 0.5-3 mm classified fibre length and a BET surface area of at least 1 sq. m/g. (I) contain 0.05-3.0 wt.% based on the wt. of polyolefin of surface active hydrophilic cpd. The absorbed dirt is removed with the cleaning material.

Pref. (I) contains a homopolymer of an olefin or a copolymer of two or more olefins. Pref. (I) are produced by flash evapn. Method is useful for removing spots from, and cleaning, textiles.

UNIL ★ D25 02774 D/03 ★GB 2051-117

Spray dried detergent powder contg. starch - to reduce friability and thus stabilise bulk density

UNILEVER NV 30.05.80-GB-017756 (30.05.79-GB-018807)

(14.01.81) C11d-03/22 C11d-11/02

30.05.80 as 017756 (5pp955)

Detergent powder of reduced friability is prepd. by forming an aq. crutcher slurry contg. detergent builder and hydrated starch, and spray drying it.

The powder exhibits less increase in bulk density during packing and handling. This avoids the need for spray-drying to low bulk densities. The method is esp. applicable to powders contg. high levels of surfactant and little or no phosphate which are partic. friable.

SOMA/ ★ D25 02851 D/03 ★J5 5144-412

Aluminium sludge treatment - by adding silicate and coagulant, adding sodium hydroxide soln. and sepg. zeolite

SOMA K 27.04.79-JP-051523

E33 M14 (D15) (11.11.80) B01j-39/14 C01b-33/28 C02f-01/66 C02f-11 C11d-03/02

27.04.79 as 051523 (4pp96)

Aluminium sludge is treated bdding silicate to waste soln. discharged from alumite treatment of the surface of aluminium or aluminium alloy such that Si/Al mol ratio in the waste soln. is 0.5-1.0, and neutralising by adding NaOH or NaOH contg. aluminium to it and adding organic high polymer coagulant to it to coagulate and separate the resulting sludge; (ii) adding NaOH soln. or NaOH soln. contg. aluminium to the sludge formed such that H2O/Na2O and SiO2/Al2O3 (both in mol ratio) are respectively 25-100 and 0.25-25; and (iii) crystallising and separating zeolite by heating the soln. obtd.

Process produces a lower water content sludge or amorphous aluminium hydroxide, and gives zeolite by heating the sludge with NaOH soln. The zeolite obtd. is useful as builder for detergent.

SOMA/ ★ D25 02853 D/03 ★J5 5144-415

Sodium hydroxide soln. recovery from waste soln. - by adding aluminium sludge and silicate, reacting mixt. to form zeolite and sepg. out zeolite

SOMA K 27.04.79-JP-051522

E34 M14 (D15 E33) (11.11.80) C01b-33/28 C01d-01/32

27.04.79 as 051522 (3pp96)

Sodium hydroxide soln. is recovered from sodium hydroxide waste soln. by adding aluminium sludge consisting of aluminium hydroxide to sodium hydroxide waste soln. contg. aluminium, and then adding silicate to the mixt., and reacting the mixt. at more than 45 deg.C to allow zeolite to crystallise out, and sepg. the zeolite.

Process makes use of aluminium sludge and to obtain zeolite having a fine particle size. The zeolite obtd. is useful as builder for detergent.

In an example, to 2L sodium hydroxide waste soln. there were added 110g aluminium sludge and 470g water glass, and the components were reacted at 93 deg.C for 2 hrs. Prod. was filtered and washed with water, by which sodium hydroxide soln. was obtd. in a yield of 96%. X-ray analysis showed that the zeolite obtd. is almost true zeolite.

TORA ★ D25 03097 D/03 ★J

Agent for cleaning appts. to which polyamide is adhered - (mixt. of ethylene glycol and/or benzyl alcohol, alka hydroxide or mineral acid and water

TORAY IND INC 04.05.79-JP-054024

A23 E17 (A35 E14 E37) (13.11.80) C08g-69/46 C11d-07/ 13/04

04.05.79 as 054024 (3pp57)

Agent is prepd. by mixing 100 pts.wt. alcohols consisting of glycol (I) and/or benzyl alcohol, 1-20 pts.wt. of alka hydroxide or mineral acid and 10-50 pts.wt. of water. Pr ethylene glycol, diethylene glycol, triethylene glycol tetraethylene glycol. Alkali metal hydroxide is pref. Li-, hydroxide etc. opt. as a mixt. Mineral acid is pref. pho hydrochloric, sulphuric and/or nitric acid.

There is no danger of ignition even when the agent is c with appts. dynamically under heating.

SANN ★ D25 03134 D/03 ★J5

Surfactant compsn. with good foaming property etc. - (fluorine-contg. surfactant and opt. fluorosulphonic acid

SANYO CHEM IND LTD 02.05.79-JP-054636

E19 (13.11.80) C11d-01

02.05.79 as 054636 (7pp117)

Surfactant contains a F-contg. surfactant of formula RfSO (and opt. fluorosulphonic acid type surfactant). In the formul 3-16C fluoroalkyl and R is H or an organic gp. e.g. 1-18C hydr of formulae -A-N-RR', -A-N(O)-R'R, -A-N-R'R'R', -A-O(A'-C A2-N-R2R3, -A3-N(O)-R5R4, -A4-N(+)R6R7R8X(-) or -A5-O(R9.

In the formulae, A is divalent hydrocarbyl gp.; A' is alkyle R', R, R' and R are each H, alkyl, aralkyl, hydroxya carboxyaralkyl, sulphoalkyl or alkanoyl; R' and R may const heterocycle with N; X is an anion; A2 is 1-6C alkylene; R2 and each H or 1-3C alkyl; A3 is 1-6C alkylene; R4 and R5 are eac alkanoyl; A4 is 1-6C alkylene; R6 and R7 are each H, 1-3C alk 3C hydroxyalkyl; R8 is H, 1-3C alkyl, 2-3C hydroxyalkyl, b carboxyalkyl (1-3C alkyl), or sulphoalkyl (1-3C alkyl); X(-) is F), Br(-), I(-), OH(-) or CH3SO4(-); A5 is 1-6C alkylene; A6 is -CH2C -CH2CH(CH3)-; n is 0 or 40; R9 is H or 1-3C alkyl; and M is K(+), Na(+) or NH4(+).

Surfactant has good surface tension-lowering performanc film-forming performance and foaming property.

YUMO- ★ D25 03135 D/03 ★J5 5

Solid or semi-solid stain-removing compsn. - contg. satd. fatt sodium salt; hardened beef tallow fatty acid or stearic acid; a myristic acid

YUHO SHOKAI KK 04.05.79-JP-054090

E17 G04 (E12) (13.11.80) C11d-09/02 C11d-10/04

04.05.79 as 054090 (3pp117)

Compsn. for removing stains from carpets, wall cloth, in decorating woven fabrics, etc., is obtd. by mixing 5-50% satd acid sodium salt as a gelling agent with a mixt. consistin hardened beef tallow fatty acid or an industrial grade steari and 5-70% coconut fatty acid, lauric acid (more than 70% p and/or myristic acid (more than 80% purity).

Compsn. is easy to dissolve in water at ordinary temp. an has a great stain-removing and cleaning capability.

Compsn. can be used in combination with the usual type stain removing compsns. e.g., surfactants, solvents, alkali bui abrasives, enzymes, bleaching agents, etc.

PROC D25 37520 S/22 = NL-1

Protease-contng liquid washing agents

PROCTER GAMBLE EURO 25.11.69-LU-059883

*E19 (D16) (15.12.80) *NL7017-143 C11d-03/38*

24.11.70 as 017143 (5pp279)

Liquid aq. washing agents (I) which contain an anionogenic non-ionogenic wash-active substance as well as enzymes are p by incorporating in water a) 2-35 wt.% alkanesulphonate; b) wt.% cpds. of formula (II) AEnX; in which A is 8-30C alkyl or alkylphenyl; E is alkylenoxy; n is 1-30; X is hydroxyl or sulpha 0.001-5.1 wt.% enzymes; d) 0.1-5.0 wt.% Ca-or Mg-salts as custo enzyme stabilising agents.

Pref. compsn. contain 5.0-20.0 wt.% alcoholpolyethoxysulpha combination with 10-25 wt.% alkanesulphonate.

(I) are enzyme-contg. liquid washing agents with great stabil storage. Cpds. (II) used are esp. alkali- and ammonium salts o sulphated condensation prod. of 1 mole of a mixture of straight-c 12-14C alcohols and 3 mole ethylene-oxide. All other custo wash-active components, strengtheners and additives ma incorporated.

D25 03254 D/03 ★SU-732-368
nt for removing colophony resin flux residues - contains hanolamine, sodium carbonate and phosphate and enol polyglycol ester cpds.
OV A P 28.04.76-SU-376105
L03 M23 (07.05.80) C11d-01/43
as 376105 (6pp314)
nt compsn. for removing colophony resin fluxes from e.g. or housings etc. consists of (in g/l): monoethanolamine 20-40, 20-30 alkylphenol polyglycol esters 10-20, Na3PO4 20-30 and 1l.
sion of monoethanolamine enhances the detergent props. and the inflammability of the compsn.

★ D25 03255 D/03 ★SU-732-371
ent for metal degreasing - contg. modified polyethylene-urfactant, alkanol and halo-hydrocarbon solvent
IND TECH INST 06.06.77-SU-492818
M12 (08.05.80) C11d-01/38 C11d-03/44
as 492818 (9pp314)
ent compsn. for degreasing metal surfaces, e.g. in prepn. for vehicle bodies etc. comprises(in wt.%):surfactant (I) 0.05-2, tropic mixt. of 1-8C aliphatic alcohol and a halo-hydrocarbon 25-80; and a halohydrocarbon solvent to 100.
I) is a cpd. of mol.wt.200-200000 has formula:(HNC2H4-)a H)6 epoxy-R1)c where R is 1-20C alkyl or alkenyl;R1 is H or 1-yl, OH or Cl; and a,b and c are whole nos. where a is greater + c, b + c is greater than 0, b lies between 0 and a or may be 0, etween 0 and a or may be 0, and a is 5-5000. The detergent has eaning power and good anticorrosion props.

/ ★ D25 03256 D/03 ★SU-732-372
ent compsn. for removing fluxing resins from printing plates ins ethanol, water and 1,1,1,-tri:chloro-ethane
BROER V S 04.01.77-SU-440523
G05 M23 (08.05.80) C11d-07/30
7 as 440523 (6pp314)
ent compsn. for removing colophony resin fluxes from g plates following soldering operations and prior to plating consists of(in vol.%):ethanol 16-17, water 4-8 and 1,1,1-roethane.
compsn. has excellent cleaning and degreasing props. and is or to similar prior art compsns. which were water- free.

★ D25 03258 D/03 ★SU-732-374
of a synthetic detergent - includes spray-drying aq. soln. reliminary treatment in magnetic field
IKHMAN I D 21.04.76-SU-350344
05.80) C11d-11/02
6 as 350344 (7pp314)
prodn. of a synthetic detergent compsn. by mixing the dry nents in water or an aq. soln. and then spray-drying, the water - aq. soln is preliminarily subjected to a uniform magnetic strength 400-300O Oe.
magnetic treatment increases the productivity of the process hances the quality of the prod.

★ D25 03286 D/03 ★SU-732-426
ifier filler for domestic fabric cleaners - contg. synthetic fatty ammonia, alkyl phosphate cpds. and di:ethyl alkoxy-methyl nium methyl sulphate
KIMETS V I 01.09.77-SU-523689
05.80) C11d-10/04 D06l-01/04
7 as 523689 (4pp314)
ifier additive for domestic fabric cleaners consists of (in 7-18C synthetic fatty acid fraction 60-70; NH4OH 3-5;alkyl-nates of 7-20C fatty alcohol fraction 10-20; quaternary nium salt (I) 3-4 and water the rest.
(I) is diethyl alkoxy-methyl ammonium methyl sulphate g alkyl gp. of formula:CnH2 + 1(where n is 10-18).The additive es high cleaning power and good anti-resorption.

1 = ★ D25 03293 D/03 ★SU-732-728
mn. of cleaning power of detergents and surfactants - includes gnation of fabric with staining compsn. and treating with aq. ammonium salt soln.
EM IND RES INST 25.08.77-SU-523485
(05.05.80) D06l-01/12 D06m-13/02 G01n-01/30 G01n-13
7 as 250877 (6pp70)
cial stain contg. pigments, oils and protein is applied onto a ned fabric dried and treated with 0.15-0.5% aq. quaternary onium salts to check the detersive power of a surfactant or a etic detergent.
stain contains(in wt.%) olive oil or sunflower oil 0.3-0.8, al oil 0.2-0.5, lamp black 0.04-0.07, black ferric oxide pigment 02, yellow ferrous oxide pigment 0.01-0.02, oleic acid 0.3-0.6, hylene glycol ethers of 10-18C synthetic fatty alcohols 0.005-0.01, ammonia 0.02-0.06, casein 0.007-0.015, ascorbic acid 0.005-0.01; the balance is distilled water.By this method the reliability of the detergent tests and the accuracy of the results are improved.Bul.17/5.5.80.

CHCF D25 00585 V/01 = US 4242-215
Detergent compsn - contg surface active agent, builder, perborate and acidic cpd
CHEM-Y FAB CHEM PROD 13.06.72-GB-027618
*(30.12.80) *NL7307-916 C11d-03/60*
31.10.78 as 956424 (+ 8.6.73-US-368361) (6pp964)
Environmental pollution free detergent compsn. consists of 10-15 wt.% surfactant(s); 30-70 wt.% builder(s); 15-35 wt.% perborate; 0.5-2 wt.% cellulose deriv.; and (a) an acid substance acceptable in detergent compsns. and having a pK of at least 2; or (b) a cpd. in which aq. solns. of the compsns. form the acid substance in situ. Component (a) or (b) is present in an amt.such that a 0.5% aq.soln. of the compsn. has an initial pH of 5.0-8.5 measured at room temp. The detergent compsn. contains not more than 5% phosphate.
Pref. the acidic substance is citric acid or alkali metal bisulphate. The surfactant is pref. of the polyether carboxylic acid type.
The compsn. is used esp. for household and commercial laundering purposes.

CHEM- ★ D25 03593 D/03 ★US 4242-216
Stabilised alkaline dishwashing detergent compsns. - contg. 1,3-di:chloro-5,5-di:methyl-hydantoin of specific size and hardness
CHEMED CORP 27.09.79-US-079430
E13 (E34) (30.12.80) C11d-07/56
27.09.79 as 079430 (4pp478)
Dry, alkaline, dishmachine detergent contains: (a) 0-50% Na2CO3; (b) 0-50% Na tripolyphosphate; (c) 0-90% Na2SO4 or NaCl; (d) 0-15% anhydrous Na metasilicate; (e) 0-30% NaOH; (f) 0-5% wetting agent (I); and (g) 0.1-90% 1,3-dichloro-5,5-dimethylhydantoin (II). The compsn. contains at least 10% of one or more of the alkalis (a), (b), (d) or (e). (II) consist of particles of size -10 to +100 mesh US screen, which have been compacted at 1000-200,000 psi so that the C12 loss on storage for 90 days is not more than 2%.
The compacted, screened (II) is stabilised for use with the above dry alkaline detergent compsns.

FARH D25 59824 B/33 = US 4242-217
Solid cleaning prod. for glass, esp. car windows - contains surfactants, phosphate(s), silicate and phosphoric acid partial ester(s)
HOECHST AG 15.02.78-DE-806344
*A97 E11 + P43 Q17 (E34) (30.12.80) *BE-874-076 C11d-03/06*
12.02.79 as 011324 (4pp964)
Compsn. for cleaning panes of glass consists of a homogeneous surfactant and binder contg. blend in the form of a hardened moulding. The blend contains (a) water soluble alkali metal phosphate(s); (b) anionic and/or nonionic surfactant(s); (c) alkali metal silicate with or without mixed water and (d) prod. obtd. by reacting P4O1O with n-butanol and ethylene glycol in a molar ratio of approx. 1:2:2. The compsn. is with or without complex former and/or solvent. Pref. compsn. contains 30-80 wt.% (a), 14-52 wt.% (b), 2-9 wt.% (c) and 2-6 wt.% (d). Any solvent used is pref. polyethylene glycol of mol.wt. 200-1000.
The compsn. is used esp. for cleaning automobile windscreens. In contact with e.g. rain water the compsn. reaches the windscreen in a fairly constant concn.

KONN D25 06068 B/04 = US 4242-219
Enzyme particles resistant to powdering under pressure - contain organic binder, e.g. methylcellulose, and filler; used mainly in detergent compsns. and in pharmaceutical compsns., etc.
GIST-BROCADES NV 20.07.77-GB-030556
*A81 B04 (A96 A97 D16) (30.12.80) *BE-869-132 A61k-37/48 C11d-03/38 C12n-09/96*
26.06.78 as 919082 (7pp964)
Enzyme-contg. particles which do not dust when subjected to mechanical pressure are prepd. by mixing the enzyme with 20-60% of a hydrophilic organic compatible cohesive (starch deriv., cellulose deriv., arabic gum, karaya gum or tragacanth) 10-60% of a builder and sufficient moist regulating agent and water to maintain the moisture content of the particles at 5-15% at ordinary temps. and RH. The builder is a 5-12C water soluble carbohydrate up to 70% of which may be replaced by a starch hydrolysate of 20-70 DE. The moisture regulator is 2-6C polyol having 2-4 OH gps.
The mixt. obtd. is mechanically divided into particles of desired size, and the particles are coated with 0.5-5% of a water repellent selected from paraffin oil, linseed oil, earth wax, cocoa fat, candelilla wax, carnauba wax, paraffin wax, beeswax, ceresine wax and/or lanolin.
The particles are used in washing and pharmaceutical compsns.

COLG ★ D25 03653 D/03 ★US 4242-377

Conditioning, esp softening, fabrics with lather - supplied from an aerosol and distributed in tumble drier

COLGATE PALMOLIVE CO 11.02.74-US-441303 (25.01.71-US-109691)

E19 F42 (30.12.80) B05d-03/12

11.02.74 as 441303 (10pp1251)

Fabrics are conditioned by applying a pressurised compsn. consisting of (a) 0.5-15 wt.% surface-active conditioner (A); (b) 0.5-15 wt.% anionic or nonionic detergent (B) as foaming agent; (c) 10-79 wt.% normally gaseous propellant (C) and (d) the balance water. The compsn. forms a firm lather, self-sustaining for at least 5 min., which is spread over the fabric by tumbling in a laundry drier. (A) is a higher fatty acid soap, cationic, amphoteric, anionic or nonionic cpd.; and (C) a cycloaliphatic or aliphatic hydrocarbon, or chlorofluoro- or fluoro-hydrocarbon.

Fabrics can also be treated with an adjuvant (D) in a simila comprising 1-30 (1-15) wt.% (D); 50-94 (50 wt.% solubiliser; 5-25 wt.% (C) and 0-30 (0.5-15) wt.% (B). (D) is esp. a fabric softener can also serve as (B).

Cotton or synthetic fabrics (opt. having a permanent-press are treated to soften them and reduce static build-up. The foa easier to apply than e.g. waxes on paper carriers with less cha spotting; and give a visual indication of how much compsn. ha used.

See Also

D23 GB 1582609

03.79 ABBOTT LABORATORIES B03 C02 D22 E13 =GB 2051-041
rtimicin A and B derivs. - 73888C/42
03.79 ABBOTT LABORATORIES B03 C02 D22 E13 *US 4242-503
ethylation of fortimicin antibiotics - 03707D/03
.06.79 ACDC STERILENS LTD D22 S05 X27 *EP --21-828
drophilic contact lens sterilisation unit - 02541D/03
.06.79 ADOLFSSON R F R D15 J02 *GB 2050-852
ing beverage - 02740D/03
.06.79 ADOLFSSON R F R D15 J02 *GB 2050-853
on gasification of liquid - 02741D/03
0.03.79 ADVANCE CO LTD D13 =FR 2451-719
roaster with temp. sensitive switch/off device - 57460C/33
.04.77 AGENCY OF IND SCI TECH D15 =J8 0049-540
metal collecting agent for treating waste water - 90242A/50
2.12.78 AGRARTUDOMANYI EGYE C03 D13 *HU T019-206
NPN-content additive for ruminant fodder - D/03
4.01.76 AGROFERM AG A23 D16 E13 F01 =CA 1091-600
ng poly-(beta)-hydroxy butyric acid from fermentation - 50380Y/29
4.06.79 AMER HOSPITAL SUPPL CORP A96 B04 D16 S03 =EP --21-

rates for turbidimetric lipase assay - 01965D/02
.04.79 AJINOMOTO KK D17 (D13) =GB 2050-798
ed starch having improved properties for food use - 79140C/45
03.04.78 AS KAZA MICROBIOL D16 (D13) *SU -732-387
bacillus pentoaceticum V-B-23 strain - 03267D/03
8.06.79 ALBANY INT CORP D15 F02 J01 *EP --21-583
of coreless hollow filament bundle for separator module -
0D/03
4.07.79 ALFA-LAVAL AGRAR GM C04 D16 *DE 2927-015
obiological liq. manure treatment control - 02194D/03
10.10.77 AS LITH ZOOLOG PARA B04 D16 *SU -733-686
reagin immunoglobulin prodn. - 03318D/03
0.06.77 AKZONA INC A11 D22 F01 (A96) *US 4242-242
ly absorbent cellulosic fibre - 03601D/03
5.06.79 AKZO NV D16 =NL 8003-366
hol removal from fermented drinks - 75366C/43
2.07.79 AKZO NV B05 D25 E16 F06 (B07 D21) *EP --21-546
. ammonium acetate salts - 02402D/03
0.03.79 ALLEGRE E ETAB D22 *FR 2451-806
er for baby's feeding bottles etc. in steriliser - 02686D/03
= 31.07.78 ALMA ISOTOPE LAB D18 *SU -732-390
nium-tanning of leather - 03270D/03
01.03.77 AS LATV MICROBIOLOG B05 D16 E16 *SU -732-377
obiological prodn. of lysine and glutamic acid - 03259D/03
02.07.79 AMERICAN CAN CO D16 *DE 3025-098
n. of fermentable glucose solns. for ethanol prodn. - 02339D/03
06.04.77 AMERICAN CYANAMID CO B05 C03 D21 #GB 1582-704
ha)-cyanobenzyl-(2)-naphthalene-acetates - 66747Y/37
08.08.79 AMERICAN CYANAMID CO B04 D16 *US 4242-501
ying pneumococcal capsular polysaccharide - 03705D/03
04.12.78 AMER LECITHIN CO D21 E19 =EP --20-706
roving water solubility of lecithin for use in e.g. shampoo -
5B/47
28.08.80 AMPLIKART SPRL D13 *BE -884-962
lking straw - 02049D/03
12.12.77 ANHEUSER BUSCH INC D16 (D17) *US 4242-451
obilisation of glucose isomerase cell material - 03678D/03
29.06.79 AGENCE NAT VALORISATION D16 J04 *EP --21-540
ultaneously contacting gas, liq. and divided solid phases - 02400D/03
28.01.74 APOTHEKERNES LAB FU A/S D15 (D13) =DS 2436-858
overy of stabilised fatty sludge - 02042W/02
25.12.72 ASAHI CHEMICAL IND KK D16 =J8 0049-826
robial cells sepn. - 13377W/08
09.08.77 AS SIBE PHYS INST D16 S03 X25 *SU -734-276
teria culture substrate electrochemical recovery controller -
21D/03
= 21.11.78 AS USSR KAREL BIOLO C03 D13 *SU -733-617
d for fur producing animals e.g. young minks - 03309D/03
29.12.77 ASLANOV YA A D12 *SU -734-482
d prod. rapid freezing unit - 03459D/03
= 13.04.77 AS USSR MICROBIOL INST D16 (D17) *SU -732-381
robiological prodn. of glucose-isomerase - 03263D/03
= 03.02.78 AS USSR BIOLOG EQUP D16 *SU -734-256
t for culturing microbial cells - 03418D/03
12.11.76 AVTEX FIBERS INC A96 D22 (A11) =CA 1091-411
hly fluid-absorbent fibres e.g. for tampons - 01693A/01

- 15.05.79 BABOR DR & CO GMBH D21 =GB 2050-829
smetic skin treatment compsns. - 84631C/48
21.06.79 BASF AG B04 D16 S03 *DE 2925-009
-lyophilised compsn. contg. dextran. - 02101D/03
23.04.76 BALLAST-NEDAM GRP NV D15 =CA 1091-590
avity settler with many narrow channels - 75876Y/43
16.05.79 BALLESTRA CHIM SPA D25 E34 J01 =GB 2050-862
rificn. of gas mixts. contg. detergent powder from spray drying -
279C/38

BANY 14.02.78 BANYU PHARM CO LTD B02 D16 =J8 0049-840
Cephapirin prepn. - 74133B/41
*BARR/ 09.11.77 BARRERA R G D11 *US 4241-640
Appts. for shaping and precooking tortillas - 03489D/03
*BART 13.11.78 BAXTER TRAVENOL LAB D22 *US 4242-310
Tube to medical soln. container sterile connector - 03631D/03
BATT 25.02.78 BATTELLE-INST EV A88 D15 J01 (A11 A14) =US 4242-159
Composite membrane prodn. for hyperfiltration - 64857B/36
BATT 24.10.78 BATTELLE MEMORIAL A11 B04 D13 (B07) =EP --20-469
Amorphous depolymerised cellulose - 34579C/19
BATT 15.11.78 BATTELLE MEMORIAL B04 D16 J04 =EP --20-623
Assaying hydrogen peroxide, peroxidase or their precursors - 41486C/23
*BATT 09.05.79 BATTELLE DEV CORP A11 D22 (A96) *US 4242-291
Reconstitution of tropocollagen to collagen fibrils - 03621D/03
BATT 05.06.79 BATTELLE-INSTITUT EV D15 J01 X25 =EP --22-072
Concn. of aq. sludge, e.g. from waste water treatment - 01946D/02
BAUM- 10.02.78 BAUMGARTNER PAPIERS SA D18 =DS 2904-570
Paper tube for making hand-filled filter tipped cigarette - 44059B/24
BAUM- 14.06.79 BAUMGARTNER PAPIERS D18 E33 =NL 8003-370
Flavouring cigarette smoke - 75361C/43
*BECI 09.07.79 BECKMAN INSTRUMENTS INC A11 D15 J01 *US 4242-298
Clearing polysaccharide ester membranes - 03626D/03
BEEC 20.04.74 BEECHAM GROUP LTD B02 C02 D16 #J8 0049-830
Clavulanic acids and derivs. - 72840W/44
BEEC 20.04.74 BEECHAM GROUP LTD B02 C02 D16 #J8 0049-831
Clavulanic acids and derivs. - 72840W/44
BEEC 20.04.74 BEECHAM GROUP LTD B02 C02 D16 #J8 0049-832
Clavulanic acids and derivs. - 72840W/44
BEEC 20.04.74 BEECHAM GROUP LTD B02 C02 D16 #J8 0049-833
Clavulanic acids and derivs. - 72840W/44
BEEC 05.03.79 VITAMINS INC D13 =SE 8007-738
Extruded, defatted wheat germ prod. - 71549C/40
BEEH- 02.11.78 BEEHIVE MACH INC D12 =EP --20-471
Appts. for extruding composite food products - 38217C/21
*BEHE- 15.06.79 BEHEERMIJ HEREMA BV D13 *NL 7904-722
Instant, pre-cooked rice - 03230D/03
*BEHW 29.06.79 BEHRINGWERKE AG B04 D16 J01 S03 (S05) *DE 2926-271
Reagent for detecting cpds. with peroxidase activity - 02171D/03
BENC 27.04.79 PROGE- D13 =J5 5144-848
Skimmed milk powder and butter fat-contg. food - 81052C/46
BEND- 21.03.79 BEND RES INC A91 D15 J01 M25 #FR 2451-764
Removing ions from aq. feed soln. - 53314C/30
*BERG/ 01.06.78 BERGA M YA B04 D16 *SU -733-685
Beta-glucuronidase enzyme prepn. for research - 03317D/03
*BERG/ 16.05.79 BERGSTROM E I D18 *SE 7904-289
Tool for skinning mink - D/03
BESN/ 27.04.76 BESNARD R D13 =GB 1582-709
Roller press for juice extn. from ligneous plants - 59455Y/34
*BIAL- 07.06.79 BIALETTI R & C SPA D11 *EP --22-090
Domestic pasta machine with mixer and extruder - 02657D/03
BIOR- 29.11.78 BIO RESEARCH D16 (D15) =US 4242-447
Quick esp. coli-form bacteria determination in liq. - 43674C/25
BIOT- 07.05.76 BIOTHERM B05 D21 E19 =CA 1091-581
Cosmetic compsn. for reducing cellulite - 79397Y/45
BIOT- 06.03.79 GES BIOTECHN FORSCH D16 E23 =J5 5144-892
Metal-free corrinoid recovery - 67859C/39
BIOT- 06.03.79 GES BIOTECHN FORSCH B02 D16 E23 =J5 5144-893
Red metal corrinoid prepn. - 67855C/39
*BIOT= 11.10.77 BIOTECH RES INST D16 *SU -732-383
Microbial cellulase producer preservation nutrient - 03265D/03
*BLEN 22.06.79 BLENDAX WERKE SCHNEIDER D21 *DE 2925-228
Inlay soap cakes mfr. - 02117D/03
BLUM/ 31.10.75 BLUM A D15 =US 4242-289
Aerator with water ejector entrainment - 32964Y/19
BODE/ 27.11.78 BODENRADER B J C04 D15 (C03 D13) =EP --20-678
Treating sludge with Lactobacillus and carbohydrate - 41479C/23
BOEF 19.06.72 BOEHRINGER MANNHEIM GMBH B04 D13 S03 S05 =NL -165-845
Triglyceride determn by lipase saponifcn - 79403U/52
BOEF 14.02.79 BOEHRINGER MANNHEIM GMBH B04 D16 (S05) =DE 2905-531
Diagnostic compsn. for detecting enzymes in body fluid - 64548C/37
*BOEF 22.06.79 SUDDEUTSCHE ZUCKER D17 *DE 2925-283
Improved two-step carbonation in sugar mfr. - 02124D/03
*BOUR/ 23.03.79 BOURQUIN R D12 *FR 2451-715
Reconstitutable, dehydrated meat prod. mfr. - 02676D/03
BRIM 13.11.74 BRISTOL MYERS CO B03 C02 D13 =NL -165-754
6-Deoxytobramycin and 6-deoxykanamycin B - 38092X/21
BRIM 15.04.76 BRISTOL MYERS CO B03 D16 =CA 1091-601
Musettamycin and marcellomycin antibiotics - 57458Y/32
*BROW- 14.05.79 BROWN INT CORP D14 *BR 8002-964
Equipment for extraction of peel oil - D/03
*BROW/ 12.04.79 BROWN R S D16 E36 J01 *US 4242-448
Sulphur di:oxide removal from stack gas - 03677D/03
*BRPE 17.05.79 BRITISH PETROLEUM LTD D15 H03 *GB 2050-856
Oil pick/up device - 02742D/03

BRTA

*BRTA 28.08.79 BRIT AMER TOBACCO LTD A97 D18 F04 J01 *BE -884-967
Smoke filter used to mfr. cigarette filter tips - 02051D/03
*BRTA 28.08.79 BRIT AMER TOBACCO LTD A97 D18 F04 J01 *BE -884-968
Smoke filter used to mfr. cigarette filter tips - 02052D/03
*BUHL 20.11.80 BUHLER BROTHERS LTD D13 *RD -200-047
Spray dried milk powder - 03249D/03
BURR- 10.02.78 BURRUS F J & CIE D18 =DS 2904-570
Paper tube for making hand-filled filter tipped cigarette - 44059B/24

CANP 26.01.77 CANADA PACKERS LTD D12 E13 =GB 1582-588
Control of nitrosamine formation in cured meat - 47681A/26
*CARB- 20.03.79 CARBOXYQUE FRANCAIS D15 *FR 2451-771
Neutralising alkaline effluent with carbon di:oxide gas - 02680D/03
*CARI= 06.06.77 CAR IND TECH INST D25 E19 M12 *SU -732-371
Detergent for metal degreasing - 03255D/03
*CASI= 27.11.78 C ASIA FOOD IND CON D16 S03 *SU -732-743
Quantitative determn. of protein in wine - 03297D/03
CHCF 13.06.72 CHEM-Y FAB CHEM PROD D25 =US 4242-215
Detergent compsn - 00585V/01
CHEE/ 17.05.79 CHEETHAM J J D21 M22 (M26) =GB 2051-132
Metal powder with silver tin alloy coating - 86633C/49
CHEM- 25.05.79 CHEMED CORP A97 D25 E34 (A14) =GB 2051-116
Foam cleaner concentrate for cleaning food plants - 78762C/44
CHEM- 31.05.79 CHEMED CORP D25 =GB 2051-115
Liq. additive for caustic soda cleaning solns. - 82450C/46
*CHEM- 01.06.79 CHEMAP AG D15 *EP --21-470
Aeration rotor for liquids - 02366D/03
*CHEM- 27.09.79 CHEMED CORP D25 E13 (E34) *US 4242-216
Stabilised alkaline dishwashing detergent compsns. - 03593D/03
*CHEM= 25.08.77 CHEM IND RES INST D25 S03 *SU -732-728
Determn. of cleaning power of detergents and surfactants - 03293D/03
*CHER= 12.04.77 CHERMUSHKIN CONFECTION D11 *SU -733-602
Grease for moulds and sheets used in food industry - 03308D/03
*CHIC/ 02.11.78 CHICK W L D16 *US 4242-459
Cell culture device for prosthesis - 03683D/03
*CHIC/ 26.12.78 CHICK W L D16 *US 4242-460
Cell culture device for prosthesis - 03684D/03
CHMA- 31.01.77 SOC PROD CHIM MAT D23 (D25) =GB 1582-609
Nitrated musk perfume compsns. - 57157A/32
CHUS 29.06.78 CHUGAI SEIYAKU KK B04 D16 =US 4242-326
Product with anticancer activity - 03824C/03
CHUS 23.03.79 CHUGAI SEIYAKU KK B07 D13 =FR 2451-934
Gelatin compsns. contg. caramel - 71863C/41
CIBA 26.05.77 CIBA GEIGY AG B04 C03 D13 (D16) =HU T019-207
Avilamycin antibiotic as animal feed additive - 86132A/48
*CIBA 06.06.79 CIBA GEIGY AG D18 E24 *EP --22-067
Pelt or fur dyeing with anionic dye - 02643D/03
*CIBA 29.06.79 CIBA GEIGY AG C03 D22 E14 F06 *DE 3024-018
Pesticidal tri:halo-vinyl-oxy-benzene derivs. - 02316D/03
*CIBA 20.11.80 CIBA GEIGY AG D15 E14 M14 *RD -200-005
Oxygen scavenging to prevent corrosion in aq. system - 03233D/03
CINO/ 15.12.78 CINOTTI W D21 =EP --20-740
Forming denture model from impression member - 49736C/28
*COLG 25.01.71 COLGATE PALMOLIVE CO D25 E19 *US 4242-377
Conditioning, esp. softening, fabrics with lather - 03653D/03
COLG 22.03.71 COLGATE PALMOLIVE CO B04 D16 (D21) =J4 7035-121
Vaccines against dental caries - 64000T/40
COLG 22.03.71 COLGATE PALMOLIVE CO B04 D16 (D21) =J8 0049-571
Vaccines against dental caries - 64000T/40
COLG 13.12.74 COLGATE PALMOLIVE CO D22 E33 =CA 1091-586
Dentifrices contg alkaline alpha-alumina trihydrate - 36019X/20
COLG 24.12.75 COLGATE PALMOLIVE CO D21 E19 =CA 1091-584
Hair conditioning compsns. contg. organic peracid - 49033Y/28
COLG 31.03.77 COLGATE PALMOLIVE CO D25 E19 =CA 1091-534
Stain removing compsn. prior to detergent washing - 55155A/31
COLG 18.05.79 COLGATE PALMOLIVE CO B05 D21 E19 =NO 8001-462
Oral hygiene composition contg. peroxy:di:phosphate - 69592C/40
COLG 14.06.79 COLGATE PALMOLIVE CO A96 B05 D21 (A14 B04) #GB 2050-824
Magnesium poly:carboxylate complex anti:tartar compsns. - 79129B/44
*COMS 14.06.79 COMMISS ENERGIE ATOMIQUE D15 K07 *EP --21-911
Treating decontamination effluent contg. radioactive ions - 02577D/03
CORP 27.04.79 CPC INTERNATIONAL INC D17 E13 (D16) =J5 5144-890
Prepn. of dextrose-contg. syrups - 76926C/43
CRDC 14.05.79 CORDIS DOW CORP A88 D15 J01 =BR 8002-969
Hollow fibre element for ultrafiltration etc. - 84773C/48
CRDC 14.05.79 CORDIS DOW CORP A88 D15 J01 =SE 8003-553
Hollow fibre element for ultrafiltration etc. - 84773C/48
CUTT 15.05.79 CUTTER LABS B04 D16 =DK 8002-125
Cultivating influenza virus for vaccine prodn. - 86753C/49

*DAIC 27.04.79 DAINICHISEIKA COLOR CHEM A97 D15 *J5 5145-509
Aggregation of suspension using biodegradable cpds. - 02998D/03

DAII- 27.07.76 DAIICHI DENSHI KOGY D15 =J8 0049-560
Closed system purification of polluted water - 22876A/12
*DAIR= 31.08.77 DAIRY IND RES INST D16 (D13) *SU -732-389
Lactobacillus acidophilum K-1 strain - 03269D/03
*DANI/ 19.03.79 DANIEL J D12 *FR 2451-712
Conveyor trolley bar attachment for poultry etc. - 02674D/03
DARL- 04.12.78 DARLING-DELAWARE D12 =EP --20-722
Low fat stabilised bone prodn. for gelatin mfr. - 45114C/25
DECI- 30.11.76 DEC INT INC A88 D14 F03 (A23) #CA 1091-440
Spray dryer for liquids-solids suspensions, esp. milk or fruit
72443A/40
DECI- 23.03.79 DEC INT INC D13 =FR 2451-709
Cheese vat salt distribution - 71812C/41
DECI- 17.05.79 DEC INT INC D13 =DK 8002-160
Curdled milk fines separation - 86617C/49
DECI- 17.05.79 DEC INT INC D13 =GB 2050-855
Curdled milk fines separation - 86617C/49
DECT 30.07.76 DECO INDS INC A35 D15 H09 #HU T019-235
Hydrocarbon prods mfr - 48054X/26
*DEGM 23.03.79 DEGREMONT SA D15 *FR 2451-894
Aeration tank for purificn. of waste water - 02692D/03
*DERC/ 13.06.79 DERCKX H A J M D13 *NL 7904-629
High speed moulding turret for lollipops from syrup - 03229D/03
DIAS 08.12.78 DIAMOND SHAMROCK CORP A96 D22 =EP --20-713
Degradation resistant ostomy seal - 45087C/25
DNIN 13.04.73 DAINIPPON INK CHEM KK D16 H04 =J4 9126-876
Regulating culture conditions of microorganism forming hydrocarbo
03176D/03
DNIN 13.04.73 DAINIPPON INK CHEM KK D16 H04 =J4 9126-877
Hydrocarbon assimilating microorganism aerobic cultivation - 03177
*DNIN 13.04.73 DAINIPPON INK CHEM KK D16 H04 *J8 0049-827
Regulating culture conditions of microorganism forming hydrocarbo
03176D/03
*DNIN 13.04.73 DAINIPPON INK CHEM KK D16 H04 *J8 0049-828
Hydrocarbon assimilating microorganism aerobic cultivation - 03177
DNIN 27.09.77 DAINIPPON INK CHEM KK B04 C03 D16 E11 (D13) =
0049-837
Ribonucleic acid prodn. - 41308B/22
DNIN 06.10.77 DAINIPPON INK CHEM KK B04 D16 =J8 0049-838
RNA prodn. by cultivation of Candida tropicalis - 44950B/24
*DOBR/ 04.01.77 DOBROER V S A97 D25 G05 M23 *SU -732-372
Detergent compsn. for removing fluxing resins from printing pla
03256D/03
DOWC 04.03.77 DOW CHEMICAL CO B05 C01 D13 (B03 C02) =C
1091-502
Growth promoting animal feeds - 63417A/36
DOWO 12.06.76 DOW CORNING CORP A97 D25 (A26) =CA 1091-53
Organo-polysiloxane antifoaming compsn. contg. wax and emulsif
21982A/12
DOWO 07.03.77 DOW CORNING CORP A97 D25 E36 =CA 1091-535
Aq. cleansing and conditioning compsn. for hard surfaces - 67331A/3
*DOWO 29.06.79 DOW CORNING CORP D15 J01 *DE 3016-306
Reverse osmosis cell for desalination - 02246D/03
DREW 25.04.79 DREW CHEMICAL CORP A97 D15 E13 M14 (A14) =
5145-181
Corrosion inhibiting compsn. for aq. systems - 64217C/37
DURD/ 17.08.78 DURDA D J D15 =EP --20-388
Waste water treatment with propeller type aerator - 23714C/13

EBAI 18.06.69 EBARA INFILCO KK D15 J01 =NL -165-660
Separating solids from suspension - 94248R/51
*EBAI 01.05.79 EBARA INFILCO KK D15 *J5 5145-595
Treating organic waste liq. contg. ammonia and phosphoric ac
03025D/03
*EBAI 01.05.79 EBARA INFILCO KK D15 *J5 5145-596
Treating organic waste liq. - 03026D/03
EBAR 30.04.74 EBARA MFG KK D15 J01 K07 =J5 0140-799
Waste water contg. otopic ruthenium treatment - 03170D/03
*EBAR 30.04.74 EBARA MFG KK D15 J01 K07 *J8 0049-719
Waste water contg. otopic ruthenium treatment - 03170D/03
*ELEC- 07.06.78 ELECTRO-NUCLEONICS B04 D16 S03 (S05) *US 4242-322
Immunoassay using bifunctional immuno-adsorbent - 03636D/03
*ELEL- 29.06.78 ELELMEZESIPARI TERV D12 *HU T019-205
Lifting and lowering mechanism for slaughter houses - D/03
ELIL 08.06.79 ELI LILLY & CO B02 C02 D16 =EP --21-684
Antibiotic A-42355 obtd. by cultivation of aspergillus nidulans
90140C/51
ENER- 11.06.79 INST ENERGETIK ZENT D15 =DE 3018-086
Purifying waste waters contg. (in)organic colouring materials
84440C/48
ENIE- 15.02.79 ENI ENTE NAZ IDROCA A97 B04 D16 =BR 8000-975
Microporous products contg. active ingredient e.g. enzyme - 60793C/3

*FARB 28.06.79 BAYER AG A97 D15 F09 H01 (A14) *DE 2926-103
Stable non-aq. dispersion of water-soluble polymer - 02156D/03

.06.79 BAYER AG D25 E34 *DE 2926-413
ning liq. with low sodium chloride content - 02178D/03
.07.79 BAYER AG A14 B07 D21 F06 (A96 A97) *DE 2927-132
y crosslinked polyacrylic acid powder prepn. - 02207D/03
.07.79 BAYER AG B03 D16 *DE 2927-534
lly pure alpha-amino-heterocyclyl-acetic acid derivs. - 02228D/03
.04.76 HOECHST AG A97 D25 (A17) =GB 1582-552
ing agents for carpets, textiles, etc. - 82383Y/46
.02.78 HOECHST AG A97 D25 E11 (E34) =US 4242-217
cleaning prod. for glass, esp. car windows - 59824B/33
.06.79 HOECHST AG C03 D13 *DE 2926-282
rolonging feed and feed additives for animals e.g. pets - D/03
6.06.79 FERGUSON A M D13 *EP --21-629
ssing of mushrooms - 02449D/03
05.77 FIRESTONE TIRE & RUBBER A26 D13 E24 F01 (A89 A97) =US 9
organo:phosphazene(s) contg. a chromophoric gp. - 41500C/24
.02.74 FIRMENICH SA B03 C02 D23 E15 (D16 D18 D21) =NL -165-
a-spiro-(4,5)-decane-6-ol and its esters - 55957W/34
.04.79 FIRMENICH SA D23 E13 (D13 D21 D25) =GB 2051-045
me and aromatic tri:cyclic lactone cpds. - 81214C/46
.04.79 FIRMENICH SA D23 E13 (D13 D21 D25) =J5 5145-680
me and aromatic tri:cyclic lactone cpds. - 81214C/46
.12.76 FIVES-CAIL BABCOCK D17 J01 =GB 1582-599
n. of seed crystals - 44427A/25
.03.79 FIVES-CAIL BABCOCK D17 J01 *FR 2451-778
inuous centrifuge partic. for drying sugar crystals - 02683D/03
09.07.76 FMC CORP C02 D15 E13 (C01 E12) =GB 1582-569
lved cyanurate separation from waste liquors - 19450A/10
4.12.76 FREUDENBERG C A88 D15 F04 J01 =GB 1582-790
permeable matted fibre diaphragm - 42402A/24
.06.79 FREUDENBERG, CARL FA A96 D22 F03 (A17 A25 A60) =DE 9
woven web of single and groups of polyolefin filaments - 56925C/33
4.02.78 FRINGS H F A D16 J01 =J8 0049-899
filtration circuit with recirculation - 64839B/36
4.06.79 FROMAGERIES BEL-LA VACHE B04 C03 D13 (B07 D21) *EP 9
inate prepn. from casein - 02590D/03
22.03.79 FUGAGNOLI J P D12 *FR 2451-783
ng, cleaning and size grading mussels and oysters etc. - 02684D/03
.05.79 FUJII H D15 *J5 5145-511
oving flocs from primary treated water - 03000D/03

11.06.79 GAGGENAU-WERK HAUS D11 =NL 8003-400
oled flush fitting backing oven - 00069D/01
22.03.79 GAGNERAUD F D15 L02 *FR 2451-901
atering sludges to solidify and harden them - 02694D/03
08.06.78 GARCIA R I D15 E36 K08 =EP --20-347
e production in chemo-nuclear generator - 05441C/03
2.06.79 GEIST J D13 *DE 2925-372
-protein foodstuffs base on cheese - 02126D/03
09.05.78 MACH GEURTSEN DEVEN D15 J01 =US 4242-209
s. for sepg. oil and water - 82928B/46
24.08.78 GILMOUR N J L B04 C03 D16 =EP --20-356
eurellosis vaccine for cattle and sheep - 07364C/05
0.11.70 GIVAUDAN L & CIE SA D23 E15 =DS 2155-671
ocyclic odourants - 33725T/21
21.04.76 GOIKHMAN I D D25 *SU -732-374
n. of a synthetic detergent - 03258D/03
03.02.77 GOMERSALL R D15 *GB 1582-701
e actuator for carbon di:oxide cylinder used to carbonate beer - 5D/03
16.10.78 GOODRICH B F CO A14 D22 F01 (A96) =EP --20-529
er-absorbent films and fibres prepn. - 69767B/38
7.05.79 GREEN CROSS CORP B05 D13 =GB 2050-799
nteral nutrition fatty emulsion - 82833C/47
27.07.78 GRIGSBY C O D13 *US 4242-362
s-type cheese prodn. - 03650D/03
02.10.78 GRIMBERG G S B07 D13 (D21) =EP --20-431
. dispersible as discontinuous phase - 31073C/17
27.04.79 GULF OIL CORP D16 (D17) =J5 5144-885
e of endoglucanase and cellobiohydrolase enzymes - 67666C/38

28.06.79 HAHN DR C KG D22 *DE 2926-130
rary tampon - 02159D/03
05.10.72 HARBURGER OELWERK B D23 =DS 2248-921
erting and protecting edible oil sterols - 07312V/05
08.06.79 HAWKER SIDDELEY BRA D15 *EP --21-576
er screen comprising travelling band of panels - 02415D/03
20.03.79 HAYASHIBARA SEIBUTS D16 (D17) =FR 2451-942
d enzyme for prepn. of prod. from starch - 79863C/45
5.06.79 HENKEL KG AUF AKTIEN D21 E24 *DE 2924-089
loro-hydroxy:ethylamino-phenol derivs. - 02084D/03

*HENK 23.06.79 HENKEL KG AUF AKTIEN D16 *DE 2925-427
Microbial protease prodn. - 02131D/03
*HERA 18.06.79 HERAEUS W C GMBH D16 S05 *DE 2924-446
Cell and tissue cultivator - 02096D/03
HERM/ 10.04.78 HERMANSSON A M I A11 D13 (A97) #CA 1091-653
Modifying starch with casein or a caseinate - 31502A/17
HIRS/ 14.10.76 HIRSCH M R D13 =US 4242-361
Ensilage process for vegetable or animal substances - 30451A/17
*HISM 04.05.79 HISAMITSU PHARM KK B05 D13 (D22) *J5 5145-613
Compsn. for relieving thirst and dehydration - 03038D/03
HITA 25.12.75 HITACHI KK C04 D15 =J8 0049-556
Tertiary water treatment for anaerobic effluents - 49091Y/28
HITA 24.11.77 HITACHI KK D15 E14 J01 =J8 0049-889
Sterilising reverse osmosis appts. - 53668B/29
HITA 22.03.79 HITACHI KK D15 X25 =FR 2451-895
Purification of waste water - 69997C/40
HITA 22.03.79 HITACHI KK D15 X25 =FR 2451-896
Purification of waste water - 69997C/40
HITF 25.09.75 HITACHI SHIPBLD ENGG KK D15 =J8 0049-555
Treatment of waste water contg. heavy metals - 33512Y/19
*HITG 27.04.79 BABCOCK-HITACHI KK D15 J01 *J5 5145-502
Appts. for desalination of sea water - 02993D/03
*HITG 27.04.79 BABCOCK-HITACHI KK D15 J01 *J5 5145-503
Appts. for desalination of sea water - 02994D/03
*HITG 27.04.79 BABCOCK-HITACHI KK D15 J01 *J5 5145-504
Multi-stage flash evaporator for e.g. sea water - 02995D/03
*HITG 27.04.79 BABCOCK-HITACHI KK D15 *J5 5145-512
Dewatering sludge cakes formed in filter press - 03001D/03
HOFF 27.04.79 HOFFMANN-LA ROCHE AG A97 B05 D16 =J5 5144-882
Totally synthetic nutrient medium - 86696C/49
HOKU- 22.10.76 HOKUEI KENSETSU KK D15 =J8 0049-553
Simple water purification system - 45036A/25
HOLK 17.07.74 HOLSTEIN & KAPPERT MASC D11 =DS 2434-344
Washing device for projecting a liq. - 81470W/50
HOOK 27.12.78 HOOKER CHEM & PLAST D15 H09 =EP --20-735
Solid fuel prodn. from waste-water sludge - 49829C/29
HOOK 27.12.78 HOOKER CHEM & PLAST D15 H09 =GB 2051-328
Solid fuel prodn. from waste-water sludge - 49829C/29
HUBE- 09.04.77 MACH HUBERT W & CO D15 #DS 2716-069
Drive for stirrer to aerate effluent - 68104Y/38

ICIL 15.03.68 IMPERIAL CHEM INDS LTD C03 D22 E14 =NL -165-727
(2)-Cyohexenyl/cyclohexanone prepn. - 49791Y/28
*ICIL 16.05.79 IMPERIAL CHEM INDS LTD D15 J04 S03 *EP --21-575
Nebulising liquid with recycling of large droplets - 02414D/03
*ICIL 22.05.79 IMPERIAL CHEM INDS LTD A97 D15 H03 *EP --21-571
Oil dispersant compsn. - 02411D/03
ICIL 22.05.79 IMPERIAL CHEM INDS LTD A97 D15 H03 =NO 8001-515
Oil dispersant compsn. - 02411D/03
*ICIL 23.05.79 IMPERIAL CHEM INDS LTD D15 *EP --21-570
Waste water treatment by continuous recirculation - 02410D/03
ICIL 31.05.79 ICI AUSTRALIA LTD B02 C02 D16 (B04 C03) =GB 2050-830
Improving ruminant response to Clostridium vaccines - 88372C/50
*ICIL 01.06.79 IMPERIAL CHEM INDS LTD D16 J04 *EP --21-606
Liquid-permeable rotor axially fed with liquid - 02435D/03
*IMMU- 27.06.79 IMMUNO AG D22 J04 S03 (S05) *EP --22-128
Preserving lipoprotein samples for electrophoretic analysis - 02671D/03
*INFL 20.10.78 INT FLAVORS & FRAGR INC B02 D13 E13 (D18 D21 D23) *US 4242-269
1-methyl-3-alkyl-2-oxa-bi:cyclo(2.2.2)octane derivs. prepn. - 03613D/03
*INFL 17.11.78 INT FLAVORS & FRAGR INC D23 E17 (D13) *US 4242-281
Prepn. of 6-hydroxy-2,6-di:methyl-heptanal - 03617D/03
INMR 04.06.76 INST MERIEUX A97 B04 C03 D16 =CA 1091-582
Immunostimulant compsn. prepn. - 86595Y/49
INMR 31.05.77 INST MERIEUX B04 D16 =US 4242-270
Bacterial esp. Bordetella pertussis endotoxin fractionation - 00267B/01
INNO- 06.11.78 INNOVA INC A88 D15 E36 J01 (X25) =US 4242-193
Layered membrane assembly for electrochemical process - 36999C/21
INRG 07.07.76 INST NAT RECH AGRON D17 S03 S05 (D16) =GB 1582-855
Hydrolysis of starch dispersion in aq. medium - 08615A/05
INRG 27.10.77 INST NAT RECH AGRON C02 D13 =US 4242-363
Orotic acid and urea feedstuff additive - 18062B/10
*INRG 26.06.79 INRA INST RECH NAT D13 (D16) *EP --22-019
Total enzymatic hydrolysate of whey protein - 02611D/03
*INSE- 21.06.79 INSERM INST NAT SAN A96 B04 D16 S03 (S05) *EP --22-005
Selective protein sepn. by affinity chromatography - 02605D/03
*INSF 06.04.79 INST FRANCAIS DU PETROLE D16 E24 *J5 5144-868
Selective extn. of pigment contained in blue green algae - D/03
INSP 06.04.72 INST PASTEUR B06 D16 =J8 0049-573
Calcium phosphate gels - 64840U/43
*INSP 29.06.79 INST PASTEUR A96 B04 D16 K08 (S03) *DE 3024-282
High activity vaccinating antigen fractions - 02329D/03
*INTE- 15.06.79 INTERMEDICAT GMBH D16 *DE 2924-181
Microorganism growth fermenter - 02087D/03

INTE-

*INTE- 21.06.79 INTEROX SA A97 D25 *EP --21-498
Stabilising peroxy cpd. particles used in detergents - 02379D/03
INVE- 06.11.78 INVENTOR INVEST AB D16 = EP --20-589
composting container with outlet opening - 38236C/21
*IRSH- 03.07.79 IRISH SUGAR COM LTD D13 *EP --21-855
Prodn. of no-cook dehydrated rice - 02560D/03
ITAG- 30.03.67 INT AGRI-SYST D12 = NL -165-636
Freezing/unfreezing trough for food - 56128X/30
ITIL- 22.11.77 ITI LTD D15 H01 = US 4241-685
Self-stabilising floating tower - 40841B/22

*JAGA 13.04.73 JGC CORP D16 H04 *J8 0049-827
Regulating culture conditions of microorganism forming hydrocarbon(s) - 03176D/03
*JAGA 13.04.73 JGC CORP D16 H04 *J8 0049-828
Hydrocarbon assimilating microorganism aerobic cultivation - 03177D/03
JAOR 13.07.77 JAPAN ORGANO KK D15 E33 = J8 0049-919
Mixing waste acidic and alkaline solns. - 42827B/23
*JAOR 26.04.79 JAPAN ORGANO KK D16 *J5 5144-876
Water prepn. for wine and brewing use - 02908D/03
*JAOR 26.04.79 JAPAN ORGANO KK D16 *J5 5144-877
Water prepn. for wine and brewing use - 02909D/03
JAPG 02.05.79 NIPPON ZEON KK A14 D16 = J5 5145-709
Blending vinyl chloride resin prepn. - 86823C/49
JOHN- 29.05.79 JOHNSON PROD CO INC A96 D21 #GB 2051-161
High ph hair conditioning compsns. - 89163B/49
JOHN- 14.06.79 SC JOHNSON & SON A97 D25 E19 = EP --21-752
Aq. stable liq. detergent compsn. - 86187C/48
*JOHN/ 16.05.79 JOHNSTON J S D14 *GB 2050-806
Appts. for continuous treatment of particulate material - 02734D/03
*JOHS 21.05.79 JOHNSON S C & SONS INC D22 E16 (E17) *EP --21-586
Controlling evapn. rate of volatile perfume - 02422D/03
*JOHS 22.06.79 JOHNSON S C & SONS INC D25 E19 *EP --21-799
Concentrate compsns. for extraction cleaning of carpets - 02527D/03

KABI 01.12.76 KABI AB B04 D16 J04 S03 (S05) = HU T019-255
Chromogenic substrates for serine protease enzymes - 28830A/16
*KAGA- 28.04.79 KAGAKU GIJUTSU SHIN D15 L03 M14 (M28) *J5 5145-175
Electrolytic treatment of copper chloride etching waste - 02949D/03
*KAGA- 28.04.79 KAGAKU GIJUTSU SHIN D15 L03 M14 (M28) *J5 5145-176
Electrolytic treatment of waste copper chloride etching soln. - 02950D/03
*KAGA- 28.04.79 KAGAKU GIJUTSU SHIN D15 L03 M14 *J5 5145-177
Treatment of alkaline etchant waste soln. contg. copper-ammonia ions - 02951D/03
KANE 08.12.76 KANEBO KK A91 D15 = J8 0049-526
Decolourising waste water contg. residual dye - 55863A/31
*KANE 14.06.79 KANEBO KK D21 E13 *GB 2050-825
Stable oil-in-water cosmetic emulsions - 02738D/03
KANF 15.03.78 KANEGAFUCHI KAGAKU B03 D16 = US 4242-452
N-carbamoyl-D-thienyl:glycine prepn. - 81190B/45
*KARO/ 22.06.79 KAROLY K D25 E34 *DE 2925-137
Granular detergent compsns. - 02112D/03
*KATS/ 05.07.79 KATSUME H D15 *DE 3022-148
Solid bowl screw centrifuge - 02265D/03
*KAWI 01.05.79 KAWASAKI STEEL KK D15 *J5 5145-510
Floating type water collector - 02999D/03
*KAZG= 12.05.77 KAZGIPROPISHCHEPROM D11 (D16) *SU -732-378
Pressed baker's yeast activation for bread-making - 03260D/03
KEYP 27.09.78 KEY PHARMACEUTICALS INC A96 B04 D21 = EP --20-532
Aq. skin prepn. contg. lecithin and tri:ethanolamine - 31071C/17
*KHNO= 12.12.77 KHARK NON ALCO BEER D16 *SU -732-386
Brewing equipment etc. microbial contamination strains identification - 03266D/03
*KIBU- 03.07.79 KIBUN CO LTD D22 S05 T06 X25 *DE 3025-273
Automatic disinfection of hands with volatile disinfectant - 02348D/03
*KIFO= 13.06.77 KIEV FOOD IND INST D17 *SU -734-283
Sugar prodn. juice carbonator - 03422D/03
*KILI/ 29.06.79 KILIAN T D11 *DE 2926-264
Baking oven charging carriage - 02170D/03
KINS- 20.05.77 KINSEI KOGYO KK D15 = J5 3144-075
Filter press for waste water - 03180D/03
*KINS- 20.05.77 KINSEI KOGYO KK D15 *J8 0049-890
Filter press for waste water - 03180D/03
*KMGA= 09.01.78 KAZA MEAT IND RES D12 *SU -733-622
Meat preservation in varnished tinned cans - 03313D/03
KONN 16.05.75 GIST-BROCADES NV B03 C02 D13 = SE 8005-599
Antibiotic dihydromocimycin and its salts - 90985X/49
KONN 20.07.77 GIST-BROCADES NV A81 B04 D25 (A96 A97 D16) = US 4242-219
Enzyme particles resistant to powdering under pressure - 06068B/04
KONN 11.05.79 GIST-BROCADES NV B04 D16 = EP --21-468
Plasmid conferring resistance to Streptomycin and Neomycin - 90824C/51

KORH/ 23.02.77 KORHONEN K D12 = US 4241-473
Carcass handling in slaughterhouse - 62206A/35
*KOTO 28.04.79 KOTOBUKI KOGYO KK A97 D15 K07 *J5 5144
Treating a waste soln. contg. radioactive material - 02891D/0
KOWA/ 15.05.79 KOWALSKY H D13 = SE 8003-655
Natural laxative products - 69827C/40
*KUBA= 18.04.75 KUBAN MEDICINE INST B04 D16 *SU -732-3
Fractional sepn. of bacterial nucleic acids - 03262D/03
KUBI 13.09.76 KUBOTA KK D15 = J8 0050-480
Treating water polluted with ammonia-contg. excreta - 34529A
KURE 24.08.76 KUREHA KAGAKU KOGYO B04 D16 (B07 D13 T019-285
Culture of basidiomycetes of coriolus species - 15867A/09
KURE 12.06.79 KUREHA KAGAKU KOGYO A11 D12 F01 (A97 8003-401
Shaped collagen materials - 00280D/01
*KURE 15.06.79 KUREHA KAGAKU KOGYO A96 B07 D22 F07 (A1 -21-750
Shaped material with surface of acylated de-N acetylate 02506D/03
*KURK 24.09.70 KURITA KIKAI SEISAK D15 *J8 0049-896
Structure for engaging filter plates of openable filter press - 031
KURK 22.06.71 KURITA KIKAI SEISAK D15 J01 = J4 8011-663
Washing filter cloth in press - 03186D/03
*KURK 22.06.71 KURITA KIKAI SEISAK D15 J01 *J8 0049-897
Washing filter cloth in press - 03186D/03
KURK 10.12.76 KURITA WATER IND KK D15 = J8 0049-554
Treating polluted water from e.g. food industry - 64145A/36
KURK 24.05.77 KURITA KIKAI SEISAK D15 = J5 3145-160
Filter press for treating waste water - 03181D/03
*KURK 24.05.77 KURITA KIKAI SEISAK D15 *J8 0049-891
Filter press for treating waste water - 03181D/03
KURK 09.06.77 KURITA KIKAI SEISAK D15 J01 = J5 4003-967
Filter press compression plate - 03184D/03
*KURK 09.06.77 KURITA KIKAI SEISAK D15 J01 *J8 0049-895
Filter press compression plate - 03184D/03
KURK 25.06.77 KURITA WATER IND KK D15 (D14) = J8 0049-900
Sludge treatment in protein recovery, juice sepn. etc. - 17159B/0
KURK 01.07.77 KURITA WATER IND KK D15 = J5 4013-657
Device for removing suspended solids - 03187D/03
*KURK 01.07.77 KURITA WATER IND KK D15 *J8 0049-901
Device for removing suspended solids - 03187D/03
KURK 05.07.77 KURITA WATER IND KK D15 = J5 4015-358
Waste water treating device - 03188D/03
*KURK 05.07.77 KURITA WATER IND KK D15 *J8 0049-902
Waste water treating device - 03188D/03
KURK 19.07.77 KURITA WATER IND KK D15 = J5 4021-675
Sludge treatment device - 03214D/03
*KURK 19.07.77 KURITA WATER IND KK D15 *J8 0050-446
Sludge treatment device - 03214D/03
KURK 02.08.77 KURITA WATER IND KK D15 = J5 4027-253
Sludge treating device - 03215D/03
*KURK 02.08.77 KURITA WATER IND KK D15 *J8 0050-447
Sludge treating device - 03215D/03
KURK 04.08.77 KURITA WATER IND KK D15 = J5 4028-068
Purificn. device for dirty water - 03216D/03
*KURK 04.08.77 KURITA WATER IND KK D15 *J8 0050-448
Purificn. device for dirty water - 03216D/03
*KURS 02.05.79 KURARAY KK A96 D21 (A14) *J5 5145-606
Plugging material for dental use - 03032D/03
KYOS- 15.12.78 KYOSHIN KK A97 D23 (A17) = J8 0050-058
Inclusion cpd. of cyclodextrin and perfume - 57230C/33
KYOY 29.10.76 KYORITSU KOGYO KK D15 E35 L03 M14 (M28) 0050-111
Copper-contg. ammonium persulphate waste etching soln. trea 46595A/26

*LAMB- 27.08.80 ETAB LAMBERT A CIE D14 J01 *BE -884-951
Liq. extractor for extracting liq. from solids - 02044D/03
*LAMB/ 17.05.79 LAMBERT W R D12 *GB 2050-807
Appts. for shucking scallops - 02735D/03
LARA/ 19.05.78 LARAUS J D15 #CA 1091-829
Purification of septic tank effluent - 85715A/47
*LEAV= 12.01.78 LENGDAVIAT INSTRUM D16 J04 *SU -734-270
Device for fluorescent research into aq. biological samples - 03420
*LEEY/ 27.06.79 LEE Y H D21 *DE 2925-915
Lathering soap foil mfr. - 02142D/03
*LEME= 12.01.78 LENGD MED INSTRUMENT RES D16 J04 *SU -734-2
Device for fluorescent research into aq. biological samples - 03420
*LENL 21.11.78 LENGD FORESTRY ACAD C03 D13 *SU -733-617
Feed for fur producing animals e.g. young minks - 03309D/03
LERE= 21.03.79 LENGD REFRIG RES D15 = FR 2451-897
Treating sewage on board ship - 73964C/42
LIFE- 23.08.76 LIFE SAVERS INC A97 D13 = GB 1582-668
Soft moist chewing gum compsn. - 04054A/02
LIFE- 21.06.79 LIFE SAVERS INC D13 = BE -883-939
Low-sugar chewing gum compsns. - 02290D/03

.79 LIFE SAVERS INC D13 *DE 3023-110
ar chewing gum compsns. - 02290D/03
09.77 LITH FOOD IND EXPTL A97 D13 *SU -733-619
servation in sugar syrup - 03311D/03
4.79 LION DENTRIFICE KK B05 D21 *J5 5145-607
ontg. compsn. prodn. - 03033D/03
6.79 GEBR LODIGE MASCH G D13 *DE 2924-326
paste drying method - 02092D/03
09.72 LUMMUS CO D15 = J8 0050-469
purification - 07297V/05

05.76 MASSACHUSETTS INST TECH B04 D16 S03 S05 = CA 1091-

thod for detecting mutagenesis - 88536Y/50
12.78 MASSACHUSETTS INST TECH D22 = EP --20-753
issue skin equiv. prepn. - 53277C/30
.11.75 MARUZEN OIL KK A91 D15 J01 (J04) = J8 0049-605
exchange resin prodn. - 44489Y/25
.08.77 MARUZEN ENG KK D15 = J5 4026-568
ter separator for e.g. industrial waste waters - 03213D/03
1.08.77 MARUZEN ENG KK D15 *J8 0050-443
ter separator for e.g. industrial waste waters - 03213D/03
.05.79 MEATPAK HAMPSHIRE D13 (D12) *GB 2050-800
of fat slices for wrapping meat - 02733D/03
7.12.76 MEGGLE MILCHIND C03 D13 = GB 1582-597
milk replacement, esp. for calf rearing - 45267A/25
9.03.79 MEGGLE MILCHIND GMB D13 = FR 2451-716
n prod. modified by reaction with aldehyde esp. formaldehyde -
C/32
7.06.79 MEGGLE MILCHINDUSTR D13 *DE 2926-010
products based on casein foam - 02143D/03
07.77 MEIJI SEIKA KAISHA D13 *US 4242-365
fried banana slices prepn. - 03651D/03
11.78 MEIJI SEIKA KAISHA B03 D16 = US 4242-327
biologically produced antibiotic SF-2052 - 35076C/20
8.04.77 MERCER R W A96 D21 *US 4242-292
ling threaded bore in dental cast - 03622D/03
.02.78 MERCK PATENT GMBH D17 E17 (E13) = US 4242-145
se and gluconic acid prepn. from glucose fructose mixt. -
B/38
.04.68 MERCK & CO INC B04 D16 = J8 0050-008
virus vaccine purification - 40012F/00
.06.77 MERCK & CO INC B04 D16 *US 4242-457
matic virus cell harvesting from growth tank - 03681D/03
.01.79 MERCK & CO INC D13 = US 4242-367
compsn. for stabilising milk prods. and desserts - 59124C/34
.04.79 MERCK & CO INC B02 C02 D13 E13 (D22) = J5 5145-691
erocyclyl:amino-cephalosporin derivs. - 82981C/47
.04.79 MERCK & CO INC B03 C02 D16 = J5 5145-696
ino-2-deoxy-beta-D-gluco pyranosyl-(1-4)-2
o-2-deoxy-D-glucose - 83096C/47
.05.79 MERCK & CO INC B02 C03 D16 E13 (D13) #DK 7901-994
very of purified riboflavin from fermentation broths - 66229B/36
.05.79 MERCK & CO INC A11 D16 (A97) *GB 2051-104
nan gum of high solubility prepd. from beer - 02772D/03
1.02.77 DRAVO CORP D15 *CA 1091-830
s. for waste water treatment by flocculation - 02070D/03
6.11.78 METROP SANIT CHICAG D15 J01 S03 = EP --20-639
ne distillation system for sewage treatment - 41494C/23
4.05.79 MASCH MEYER AG A88 D15 J01 K07 = SE 8003-514
active waste filtration process - 86565C/49
08.03.79 MIDDAUGH R E D22 *US 4242-311
v system for garbage container - 03632D/03
3.02.79 MILES LABORATORIES INC B04 D16 J04 S05 (S03) = DE
1
surement of glucose in body fluids - 53328C/31
0.11.78 MILO INT INC D13 #EP --20-381
essing of sorghum grain - 87771A/48
14.11.77 MINNESOTA MINING CO A96 B04 D16 S03 (S05) *US
26
petitive binding immunoassay for antigens - 03540D/03
23.03.79 MIRA LANZA SPA D25 E19 = FR 2451-940
ning powder compsn. of low phosphate content - 55257C/32
1.06.77 MITSUBISHI KAKOKI KAISHA D15 J01 = J8 0049-907
solid contact device for treatment of waste water etc. - 16757B/09
5.10.76 MITSUI TOATSU CHEM INC D15 = J8 0050-473
ent purification - 18078A/10
7.04.78 MITSUI TOATSU CHEM INC B05 D16 E17 = US 4242-525
vic acid salts prodn. - 79334B/44
02.05.79 MITSUBISHI ELECTRIC CORP D15 *J5 5145-516
te water filter used for sludge sepn. - 03003D/03
05.08.75 MITSUBISHI CHEM IND KK D15 = J8 0050-478
ting waste water from livestock yard - 22451Y/13
4.09.76 MITSUBISHI CHEM IND KK D15 F06 M11 = J8 0049-557
hate-contg. waste water treatment - 34525A/19
08.06.77 MITSUBISHI CHEM IND KK A88 D15 J01 = J8 0049-883
nbrane for use in ultrafiltration and reverse osmosis - 12896B/07

MITU 26.07.77 MITSUBISHI CHEM IND KK B04 D16 = J8 0049-600
Poly-2'-azido-2'-deoxy:inosinic acid - 25063B/13
*MOCH= 11.07.77 MOSC CHEM IND RES B05 D21 *SU -733-681
Insect, e.g. mosquito, repellent cream - 03316D/03
*MOFA= 12.04.77 MOSC FATS RES INST D11 *SU -733-602
Grease for moulds and sheets used in food industry - 03308D/03
*MOFO= 13.04.77 MOSC FOOD IND TECH D16 (D17) *SU -732-381
Microbiological prodn. of glucose-isomerase - 03263D/03
*MOLL/ 00.00.78 MOLL H D15 *DE 2927-802
Waste water flocculation treatment - 02235D/03
*MOMI 24.04.79 MORINAGA & CO LTD D13 *J5 5144-852
Mfg. chewing gum for combining with ice cream - 02906D/03
MORG 01.08.70 MORINAGA NYUGYO KK D13 = NL -165-637
Baby milk demineraliser - 10204T/07
*MORI/ 01.05.79 MORITA M D15 *J5 5145-515
Vacuum type press roll filter - 03002D/03
*MOSU 11.07.77 MOSCOW LOMONOSOV UNIV B04 D16 *SU -732-382
Microbiological prodn. of proteolytic enzyme - 03264D/03
*MRSC 03.08.78 MARS INC D11 *US 4241-649
Appts. for filled dough tube mfr. - 03490D/03
MULL- 21.12.73 MULLER H D16 J02 = J8 0049-532
Auto-aeration and -gasification of micro organism culture substrates - 44767W/27
*MULL/ 22.06.79 MULLER F D13 *DE 2925-231
Cheese storage rack - 02119D/03

*NADI 29.05.79 NATIONAL DISTILLERS CORP D16 *US 4242-454
Continuous prepn. of ethanol - 03679D/03
*NADI 25.06.79 NATIONAL DISTILLERS CORP D16 *US 4242-455
Continuous fermentation of sugars to ethanol - 03680D/03
NAGA 21.04.77 VEB KOMBINAT NAGEMA D13 = GB 1582-822
Sweets wrapping machine - 40522A/23
NALC 31.05.77 NALCO CHEMICAL CO A97 D15 K05 M25 (A14) = CA 1091-536
Breaking emulsions from organic solvent extn. of uranium - 19915B/10
NALC 23.02.78 NALCO CHEMICAL CO A97 D15 = CA 1091-538
Single addn. organic-inorganic blend emulsion breaking compsn. - 01630C/01
NATR 15.08.78 NATIONAL RES DEV CORP B04 D16 = EP --20-355
Enzymatic process requiring regeneration of reduced enzyme - 23723C/13
NATT 26.04.79 NAT STARCH & CHEM CORP A81 D22 G03 (A14 A96) = J5 5145-778
Pressure sensitive fusible adhesive prepn. - 62324C/36
NEOL- 22.06.79 NEOLOY PRODS INC D21 M26 = DE 3001-126
Non-precious stainless dental alloy - 80546C/45
NEST 08.12.75 SOC PROD NESTLE SA B02 D13 E13 = CA 1091-504
Caffeine extn. from vegetable materil using fatty material - 36274Y/21
*NEST 14.06.79 SOC PROD NESTLE SA D13 *DE 3021-251
Shelling and/or decaffeination of coffee beans - 02255D/03
NGUY/ 11.12.78 NGUYEN P S D22 F07 = EP --20-580
Disposable paper pants - 45086C/25
NIGL/ 24.04.79 NIGLETTE J M B04 D16 J04 S03 (S05) = J5 5144-899
Electrochemical protease or anti-protease determn. - 79273C/45
*NIJH- 25.06.79 MACH G J NIJHUIS BV D12 *EP --21-548
Apparatus for electrically stunning animals esp. pigs - 02403D/03
NIKK- 00.00.77 NIKKEI SANGYO KK D15 = J5 2121-866
Filter cake removal from rotary filter drum - 03217D/03
*NIKK- 00.00.77 NIKKEI SANGYO KK D15 *J8 0050-449
Filter cake removal from rotary filter drum - 03217D/03
*NIKZ 00.00.77 NIPPON KEIKINZOKU SOGO D15 *J8 0050-449
Filter cake removal from rotary filter drum - 03217D/03
NIPT 10.12.76 NIPPON TENSAI SEITO KK D16 (D11) = J8 0049-829
Bread yeast prodn. by aerobic culture on conc. beet sugar waste - 55951A/31
*NIRA 24.04.79 UNITIKA KK A88 D18 J01 *J5 5144-875
Cigarette filter prodn. - 02907D/03
NIRA 23.05.79 UNITIKA KK D16 = GB 2051-078
Continuous culture of bacteria for acetate kinase prodn. - 88643C/50
*NISC 14.06.79 NISSAN CHEM IND KK D23 E17 *DE 3022-296
Cis-trans isomerisation of beta, gamma-unsatd. cpds. - 02272D/03
NISC 14.06.79 NISSAN CHEM IND KK D23 E17 = NL 8003-281
Cis-trans isomerisation of beta, gamma-unsatd. cpds. - 02272D/03
*NISH/ 02.05.79 NISHINO I D15 *J5 5145-507
Reverse osmosis device for mfg. fresh water from brine, etc. - 02997D/03
NISS- 27.12.72 NISSHIN HOUI MILLIN D13 E13 = J8 0049-822
Antioxidant compsns - 24847W/15
*NISW 02.05.79 NISSHIN OIL MILLS KK D23 (D13) *J5 5145-789
Oils and fats without soapy flavour prepn. - 03129D/03
NISY 31.07.78 NIPPON GOHSEI KAGAK A60 B03 C02 D22 (D21) = US 4242-336
Synergistic antibiotic and antifungal compsn. - 22604C/13
NITL 26.09.77 NITTO ELECTRIC IND KK D14 J01 = J8 0049-884
Multi-pipe membrane liq. separator - 39915B/21
NITL 28.10.77 NITTO ELECTRIC IND KK A88 D15 J01 = J8 0049-885
Prodn. of complex membrane for reverse osmosis and ultrafiltration - 48118B/26

NITL

NITL 28.10.77 NITTO ELECTRIC IND KK A88 D15 J01 = J8 0049-886
Tubular semipermeable membrane prodn. - 48119B/26
NITL 15.11.77 NITTO ELECTRIC IND KK D15 J01 = J8 0049-888
Membrane sepn. treatment of food and fermentation waste - 51825B/28
NITT 02.05.79 NITTO CHEM IND KK A41 D16 E16 = J5 5144-889
Continuous prodn. of acrylamide or methacrylamide - 90822C/51
*NITW 02.05.79 NITTETSU MINING KK D15 M11 *J5 5145-200
Refining waste soln. exhausted from electrolytic polishing - 02963D/03
*NIUA 01.05.79 NIPPON SPINDLE MFG KK D15 *J5 5145-599
Cost treatment of waste water - 03027D/03
NMHB 30.05.79 NORDISCH MASCH R BAADER D12 #CA 1091-405
Fish filleting machine - 69556C/39
NNSH 29.11.78 NIPPON SHINYAKU KK D12 = J8 0049-818
Meat prod. mfr. - 50885C/29
NORQ 18.11.76 NORIINSHO KK A97 D15 E32 J01 = J8 0049-542
Cellulosic mercury ion absorbent prepn. - 50578A/28
NREN 30.04.76 NIPPON WATER TREATM KK D15 = J8 0050-470
Treatment of metal ion-contg. water - 90751Y/51
NTOK 06.06.77 NORITAKE TEKKOSHO D15 = J5 4001-466
Filter cake removal from spring suspended filter cloth - 03182D/03
NTOK 06.06.77 NORITAKE TEKKOSHO D15 = J5 4001-467
Filter press cake remover - 03183D/03
*NTOK 06.06.77 NORITAKE TEKKOSHO D15 *J8 0049-892
Filter cake removal from spring suspended filter cloth - 03182D/03
*NTOK 06.06.77 NORITAKE TEKKOSHO D15 *J8 0049-893
Filter press cake remover - 03183D/03

*ODFO= 10.02.78 ODESS FOOD IND TECH D13 *SU -733-620
Prodn. of enriched concentrate for use in food - 03312D/03
OLIN 21.05.79 OLIN CORP A97 D25 = BR 8003-105
Novel alkoxy bis:tri:alkoxy:siloxy silane polymer surfactants - 69594C/40
OMRO 03.03.76 OMRON TATEISI ELTRN KK D16 J04 = J5 2106-791
Enzyme electrode e.g. for clinical urea determn. - 03169D/03
*OMRO 03.03.76 OMRON TATEISI ELTRN KK D16 J04 *J8 0049-707
Enzyme electrode e.g. for clinical urea determn. - 03169D/03
OPUS- 27.04.79 OPUS AB D16 E12 (D22) #J5 5145-692
Liquid or tabletted preservative for bacteriological samples - 66558B/37
OREA 30.04.76 L'OREAL SA D21 E24 = CA 1091-687
Nitro amino phenyl substd. alkyl ethers - 00009Y/01
OREA 26.04.77 L'OREAL SA A96 D21 E16 = GB 1582-617
Aerosol dispenser contg. hair lacquer compsn. - 76265A/43
OREA 26.04.79 L'OREAL SA D21 E24 = J5 5145-762
Substd. meta-phenylene di:amine cpds. - 78918C/45
OREA 15.05.79 L'OREAL SA D21 = BR 8002-987
Cosmetic compsn. for the hair, pref. a shampoo - 84341C/48
OREA 15.05.79 L'OREAL SA A96 D21 = BR 8003-005
Cosmetic compsn. for washing and combing out hair - 84342C/48
OREA 15.05.79 L'OREAL SA A96 D21 = DK 8002-097
Cosmetic compsn. for washing and combing out hair - 84342C/48
ORTH 26.04.79 ORTHO PHARM CORP B04 D16 S03 (S05) = J5 5145-616
Mono:clonal antibody to human helper T cells - 83054C/47
ORTH 26.04.79 ORTHO PHARM CORP B04 D16 S03 (S05) = J5 5145-617
Mono:clonal antibody produced by hybrid cell line - 83055C/47
*ORTH 13.06.79 ORTHO DIAGNOSTICS A97 B04 D16 S03 (S05) *DE 3022-278
Polymer bound erythrocytes and stroma - 02268D/03
OSAO- 13.02.75 OSAKA OXYGEN IND D15 G06 J01 = J8 0049-559
Photographic waste liquor treating system - 82161X/44
*OSIP/ 28.04.76 OSIPOV A P A97 D25 L03 M23 *SU -732-368
Detergent for removing colophony resin flux residues - 03254D/03

*PACI- 01.05.79 PACIFIC CHEM IND CO D21 (D16) *GB 2051-076
Moisturising component for cosmetics - 02768D/03
*PALO/ 20.03.79 PALOMBA J D11 *FR 2451-714
Carrier to load oven with dough pieces from prover - 02675D/03
*PASI/ 12.06.79 PASILAC A S D13 *GB 2050-797
Milk concentrate prodn. for cheese or sour cream mfr. - 02732D/03
*PASS/ 22.06.79 PASSERI M A D22 *EP --22-010
Animals litter comprising hemp residue and/or grape pulp - 02607D/03
PATE- 13.07.77 PATERSON CANDY INT D15 = GB 1582-650
Flotation clarification process - 69900B/38
PERF- 12.02.79 PERFLUCTIV-CONSULT D11 = DE 2905-284
Baked article e.g. bread prod. system - 61645C/35
*PETU/ 26.12.77 PETUKHOV A G C03 D16 E17 *SU -732-379
Microbiological prodn. of itaconic acid - 03261D/03
PFIZ 23.12.71 PFIZER CORP D12 E13 = J8 0049-583
Isocitric acid lactone - anhydride - 43040U/31
PFIZ 19.04.79 PFIZER INC B05 D16 = J5 5144-888
High yield prepn. of 2,3-di:hydroxy-benzoate - 62215C/35
PFUL/ 22.12.78 PFULG F C04 D16 E17 = EP --20-682
Anaerobic fermentation plant to produce methane and by/products - 49760C/28

PHIM 20.09.78 PHILIP MORRIS INC D18 (D16) = EP --20-472
Increasing filling power of tobacco - 31067C/17
*PHIM 05.06.79 PHILIP MORRIS INC D18 E13 *EP --21-663
Smoking compsns. flavoured with pyrazine derivs. - 02467D/0
*PHYS= 08.12.78 PHYS ORG CHEM INST C03 D13 *SU -733-618
Feed mixt. for young poultry - 03310D/03
*PILL 24.10.78 PILLSBURY CO D11 E17 *US 4242-366
Emulsifier system for dry, prepd. cake mixes - 03652D/03
*POLY- 25.06.79 POLYMER TECHN CORP A96 D25 E19 *DE 3021
Contact lens cleaning compsns. - 02250D/03
PORA/ 24.08.76 PORAT M D22 = GB 1582-669
Dressing for wound - 18106A/10
*PREC- 16.10.78 PRECISION CAST SPEC A96 D22 *US 4241-463
Femoral head and neck prosthesis - 03478D/03
PROC 25.11.69 PROCTER GAMBLE EURO D25 E19 (D16) = NL -16
Protease-contng liquid washing agents - 37520S/22
*PROC 12.06.79 PROCTER & GAMBLE CO D13 E19 *EP --21-481
Partially encapsulated flavour compsns. - 02370D/03
*PROC 13.06.79 PROCTER & GAMBLE CO D13 *EP --21-483
Water-free flavour enhancing compsns. - 02372D/03
*PROC 18.06.79 PROCTER & GAMBLE CO D25 E19 (E33) *EP --21-4
Low phosphate detergent compsns. with high soil removal - 0237
PROC 18.06.79 PROCTER & GAMBLE CO D22 E14 = EP --21-492
Disposable diaper with wetness indicator - 84085C/47
*PROC 20.06.79 PROCTER & GAMBLE CO A96 D21 E19 *EP --21-50
Hair conditioning prods. - 02384D/03
*PROC 21.06.79 PROCTER & GAMBLE CO B05 D25 E17 *EP --21-497
Prepn. of mono:alkyl ether(s) of polyoxyalkylene glycol(s) - 0237
*PROC 29.06.79 PROCTER & GAMBLE CO D25 E19 *EP --21-545
Abrasive-contg. liq. detergent compsns. - 02401D/03
PROJ- 18.10.78 PROJECTUS INDUSTRIP D15 J01 (J08) = EP --20-51
Solar powered sea water desalination plant - 34573C/19
*PROT= 23.02.77 PROTEIN BIOSYNTHESI D16 H04 *SU -732-388
Candida guilliermondii VSB-744 strain - 03268D/03
PURD 02.10.78 PURDUE RESEARCH FOUNDATI A96 B07 D13 = EP 496
Film-coating foods or pharmaceuticals with polymer - 27285C/16
PURO- 01.05.75 PUROPORE INC A88 D15 F01 J01 (A11) = CA 1091
Cellulose acetate asymmetric hollow fibre dialysis memb
87275X/47

RAND 22.12.76 CHEM IND RANDSTAD NV C03 D13 = CA 1091-50
Stabilising folic acid by microencapsulation - 40323A/23
*RECK 30.05.79 RECKITT & COLMAN PR D25 E16 (E12 E34) *EP --21-
Aq. thickened bleach compsns. - 02418D/03
RECK 12.05.80 RECKITT & COLMAN PROD D25 E16 (E12 E34) 2051-162
Aq. thickened bleach compsns. - 02418D/03
RGBL- 19.12.78 RGB LAB INC A97 D13 (A26) = US 4242-364
Dried solid particles of liq. fat encapsulated in carbohydrate
46673C/27
RHON 04.04.75 RHONE-POULENC INDUSTRIES A97 B04 D16 J01 (A
= J8 0049-259
Mineral supports grafted with silanes - 77554X/42
RHON 09.12.75 RHONE-POULENC INDUSTRIES A25 D25 (A97) 1091-843
Polyurethane with hydrophobic and hydrophilic gps. - 41678Y/24
*RICH 22.06.79 RICHARDSON-MERRELL INC D13 *DE 2925-229
Herbal sweets mfr. - 02118D/03
*RICH- 11.12.78 RICHARDS OF ROCKFOR D15 *US 4242-199
Aeration appts. with axial flow impeller - 03588D/03
RICT 21.03.79 RICHTER GEDEON VEGY D15 J08 = FR 2451-718
Heating or cooling plant for wet solids partic. pulpy mate
71596C/41
RICT 21.03.79 RICHTER GEDEON VEGY D12 (D15) = FR 2451-767
Removal of solids from waste liquids e.g. from slaughter ho
72785C/41
RICT 21.03.79 RICHTER GEDEON VEGY D15 J08 = FR 2452-076
Dryer-granulator for heat-sensitive organic materials e.g. biolo
71595C/41
RICT 21.03.79 RICHTER GEDEON VEGY D15 J08 = GB 2051-331
Heating or cooling plant for wet solids partic. pulpy mate
71596C/41
*RIEG 06.06.79 RIEGEL TEXTILE CORP D22 F07 *EP --21-662
Multilayer absorbent pad for disposable diaper - 02466D/03
RITP 23.03.77 SYBRON CORP A96 D21 = CA 1091-486
Dental filler introducing ionised silver into dental pulp - 73070A/41
ROHG 23.03.79 ROHM GMBH D18 = FR 2451-943
Liming of hides and skins - 71735C/41
ROHG 28.04.79 ROHM GMBH D18 = J5 5145-800
Simultaneous swelling and unhairing of hides - 82713C/47
ROQF 15.06.79 ROQUETTE FRERES SA A97 D13 = NL 8003-369
Stable sugarless chewing-gum not causing dental caries - 00278D/0
RUBI- 11.05.76 RUBINSTEIN H INC A96 D21 E17 (E16) = CA 1091-58
Aq. hair shampoo and conditioner compsn. - 85090Y/48
RUHR 25.05.76 RUHRCHEMIE AG D23 E15 = CA 1091-696
Perfume compsns. contg. isomeric tricyclodecanes - 88397Y/50
*RYDE- 22.06.79 RYDER INT CORP D22 S02 (S03 S05) *US 4242-304
Disinfector for contact lenses - 03628D/03

.11.76 SAINT-FIRMIN A R B04 C03 D16 *US 4241-536
o tumour and embryo formation in plant seedlings - 03485D/03
.06.79 OTSUKA PHARM KK B02 D16 *DE 3022-250
alosporin antibiotic cephamycin C microbiological prodn. - D/03
.06.79 OTSUKA PHARM KK B02 D16 =NL 8003-449
alosporin antibiotic cephamycin C microbiological prodn. - D/03
6.04.79 SAKAI T D16 *J5 5144-879
ving unpleasant smell specific to sake - 02910D/03
.10.76 SAKAI CHEMICAL IND KK D13 =J8 0049-820
t dried foods prepn. - 39539A/22
2.05.79 SANYO CHEM IND LTD D25 E19 *J5 5145-798
ctant compsn. with good foaming property etc. - 03134D/03
7.06.79 SANDOZ SA A97 D25 E19 (D21) *BE -883-952
gent compsns. pref. in paste form - 02023D/03
1.05.79 SANKYO KK B03 D16 =SE 8001-338
acoline K prepd. by cultivation of Monascus strains - 69578C/40
27.03.75 SANYO CHEM IND LTD A11 C03 D22 E17 (E16 E32 E33) 12-846
r-absorbing resin prodn - 77929X/42
4.04.77 SANYO KOKUSAKU PULP B04 D16 (D13) =J8 0049-836
n. of ribonucleic acid having low deoxyribonucleic acid content - 5A/49
9.08.71 SASAKURA KIKAI SEIS D15 J01 =J4 8025-685
tant brine level maintenance in multistage flash evaporator - 9D/03
9.08.71 SASAKURA KIKAI SEIS D15 J01 *J8 0049-881
tant brine level maintenance in multistage flash evaporator - 9D/03
04.10.77 SASAKI H D21 *US 4242-089
al prosthesis with magnetic retention - 03538D/03
16.06.79 SAUFF H D16 E17 (D15) *DE 2924-387
nane generation from organic residues - 02095D/03
30.10.78 SCHOLE M L B05 D21 =EP --20-617
er-contg. dentifrice for removing or preventing calculus - 87517B/48
05.06.79 SEEWER MASCH AG D11 *DE 2922-702
gh-rolling machine - 02074D/03
.03.75 SEKISUI CHEMI IND KK A35 C04 D16 (A21) =J8 0050-475
mposition of urea acetaldehyde condensates - 87528X/47
.06.79 SEKISUI KAGAKU KOGY A96 B04 D16 J04 *EP --21-817
d chromatographic filler of particulate synthetic polymer - 4D/03
1.12.78 SERSEN SOC ETUD REC D15 J03 =EP --20-661
er desalination process by electrochemical oxidn. of salt - 45094C/25
4.10.78 SETRIC SOC ETUD TEC B04 D16 J04 S03 =EP --20-488
rmn. of oxidisable substrate, esp. lactate, with enzyme electrode - 4C/19
0.06.76 SHINMEIWA IND KK D15 =J5 3002-761
uum liq. filtering device - 03164D/03
0.06.76 SHINMEIWA IND KK D15 *J8 0049-528
uum liq. filtering device - 03164D/03
6.08.74 SHIONOGI KK B05 C03 D13 E14 (B02 B03) =CA 1091-652
l-aryl-substd. dipeptides - 00113X/01
9.12.77 SHIROMUGIMAI KK D11 =J5 4080-444
k boiling dried noodle prepn. - 03175D/03
9.12.77 SHIROMUGIMAI KK D11 *J8 0049-814
k boiling dried noodle prepn. - 03175D/03
1.10.77 SHISEIDO KK D21 E24 =J8 0050-005
pigment for use in cosmetics - 49819B/27
2.05.79 SHISEIDO KK A96 D21 *J5 5145-608
er and oil resistant cosmetic - 03034D/03
2.05.79 SHISEIDO KK A96 D21 *J5 5145-609
er repellent cosmetic with excellent skin affinity - 03035D/03
30.12.75 SHIMIZU CONST D15 J03 =J8 0049-552
trolytic waste water treatment - 65845Y/37
19.07.75 SHOFU TOSHI SEIZO KK D21 M22 (M26) =J8 0050-094
ial amalgam powder compsn. - 18728Y/11
.02.78 SIEMENS AG D15 J04 S03 S05 =US 4242-301
rmn. of dissolved organic solids content in water - 42426B/23
.06.79 SIEMENS AG D15 J04 S03 *DE 2924-285
ctive ion determn. in aq. soln. - 02091D/03
1.02.78 SIREN M J A35 D18 J01 (A11) =US 4242-226
r material for gas or liq. media, esp. tobacco smoke - 63432B/35
23.04.76 SKIMOVEX BV D15 =CA 1091-590
vity settler with many narrow channels - 75876Y/43
20.10.78 SLAGTERIERNES FORSK D12 =GB 2050-808
aning carcass surface by tool with rotating head - 34558C/19
28.08.79 ST LAWRENCE TECHN D17 *BE -884-954
tinuous prodn. of modified liquid carbohydrate - 02046D/03
5.09.77 PROD PURS COURCELLE SA D22 E14 *GB 1582-774
enoxy-alkyl)-methyl-di:alkyl-ammonium salts - 02721D/03
18.06.78 SMITH KLINE-RIT B04 D16 =GB 1582-763
nuated influenza vaccine contg. H3N2 strain - 03877Y/03
13.10.77 SNAMPROGETTI SPA D16 J04 =US 4242-461
ial flow catalytic enzyme reactor for isomerisation of fructose - 52B/16

SNOW 06.09.78 SNOW BRAND MILK PRODUCTS D16 =US 4242-450
Enzyme hydrolysis of sugars, proteins - 23150C/13
SNOW 20.03.79 SNOW BRAND MILK PRODUCTS D13 =FR 2451-708
Cheese snacks mfr. - 71817C/41
*SNOW 26.06.79 SNOW BRAND MILK PRODUCTS D13 T06 X25 *DE 3018-008
Formation of spherical portions from extruded sections e.g. of cheese - 02247D/03
SOCH 15.05.79 SOC CHIM ORG BIOL AEC B05 D16 E19 =GB 2051-053
D-alpha-aminoacid prepn. by enzymatic hydrolysis of hydantoin - 84365C/48
SOCH 15.05.79 SOC CHIM ORG BIOL AEC B05 D16 E19 =SE 8003-630
D-alpha-aminoacid prepn. by enzymatic hydrolysis of hydantoin - 84365C/48
SOLA- 05.12.78 SOLAR DENTAL CO INC A96 D21 (A11 A14) =EP --20-681
Denture adhesive providing good adhesion to oral cavity - 45097C/25
*SOMA/ 27.04.79 SOMA K D25 E33 M14 (D15) *J5 5144-412
Aluminium sludge treatment - 02851D/03
*SOMA/ 27.04.79 SOMA K D25 E34 M14 (D15 E33) *J5 5144-415
Sodium hydroxide soln. recovery from waste soln. - 02853D/03
SQUI 28.07.70 SQUIBB E R & SONS INC B04 D22 E16 (E13) =NL -165-655
Enzyme-inhibiting peptides - 10351T/07
SQUI 01.05.79 SQUIBB E R & SONS INC B02 D16 #J5 5144-897
Prepn. of penicillin(s) by side chain precursor fermentation - 64601B/35
SQUI 31.05.79 SQUIBB E R & SONS INC B01 D21 =GB 2050-831
Antiinflammatory corticosteroid in the form of a stick - 88686C/50
STAM 29.01.73 STAMICARBON BV D15 =SU -733-514
Aerating effluent and keeping sludge in suspension - 57251V/32
STEI- 21.07.77 STEIN S ASSOC INC D14 =CA 1091-610
Leak-free housing for vertical screw conveyor - 91271A/50
STEM 27.04.79 STEINMULLER L & C GMBH D15 =J5 5145-508
Salt water desalting by reverse osmosis - 79067C/45
STEM 21.06.79 STEINMULLER L & C GMBH D15 J01 =DE 2924-971
Desalination of solutions by reverse osmosis - 10555C/06
STEM 21.06.79 STEINMULLER L & C GMBH D15 J08 =DE 2925-025
Double reservoir for energy recovery in water technology - 10556C/06
STER 18.02.75 STERLING DRUG INC B03 D16 =NO 8003-185
Aminocyclitol antibiotics of the streptamine type - 67317X/36
STER 22.09.75 STERLING DRUG INC B03 D16 =NO 8003-186
Aminocyclitol antibiotics of the streptamine type - 67317X/36
STOE- 19.01.79 STOELTING INC D14 =US 4241-590
Ice cream mixing worm - 55454C/32
STRI 09.04.79 SRI INT D16 (D17) =J5 5144-886
Cellulase prodn. by Thielavia terrestris cultivation - 75619C/43
*STRK 12.06.79 STORK PMT BV D12 *NL 7904-602
Neck vertebrae stripper for fowl carcass processing line - 03224D/03
SUCR- 02.06.75 SUCREST CORP A97 D17 =SE 8005-766
Carbohydrate removal esp. from molasses on ion exclusion resin - 94687X/51
*SUMO 19.06.79 SUMITOMO CHEMICAL KK D23 E13 *EP --21-769
Prodn. of rose oxide from citronellol - 02514D/03
SUNZ 09.07.75 SUN STAR DENTIFRICE D21 E13 =J8 0049-561
Tooth paste compsn. contg. sucrose fatty acid ester - 17255Y/10
SUNZ 28.10.75 SUN STAR DENTIFRICE A96 B04 D21 E19 =J8 0049-562
Dentifrice compsns. contg. lysozyme stabilised with sodium fluoride - 42292Y/24
SUNZ 16.11.78 SUN STAR HAMIGAKI K A96 D21 (D16) =J8 0050-006
Buccal compsn., e.g. tooth paste - 48600C/28
*SUNZ 26.04.79 SUN STAR HAMIGAKI K A96 B04 D16 *J5 5144-894
Lectin sml-91-prodn. - 02911D/03
*SUNZ 26.04.79 SUN STAR HAMIGAKI K A96 B04 D16 *J5 5144-895
Microbial lectin SSL-91 prodn. - 02912D/03
SUZU/ 24.06.75 SUZUKI Y D15 =J5 2002-058
Automatic discharge appts. for treated waste water - 03163D/03
*SUZU/ 24.06.75 SUZUKI Y D15 *J8 0049-527
Automatic discharge appts. for treated waste water - 03163D/03
SVME- 03.02.78 SVENSKA MEJERIERNAS D13 #GB 1582-806
Continuous prodn. of buttery prod. spreadable at low temps. - 37197B/20
SVME- 15.06.79 SVENSKA MEJERIERNAS D13 =DE 3021-379
Prodn. of butter flavour contg. di:acetyl - 75344C/43
SVME- 15.06.79 SVENSKA MEJERIERNAS D13 =NL 8003-457
Prodn. of butter flavour contg. di:acetyl - 75344C/43
*SVVA- 17.04.79 SVENSKA VARV UTVECK D15 *SE 7903-323
Condensers in fresh water evaporator - D/03
*SYNA- 19.06.79 SYNAROME-H FRAYSSE D23 E15 *EP --21-952
Perillyl alcohol and 7,8-di:hydroxy para-menthene 1 prepn. - 02591D/03

TABU/ 17.05.77 TABUSHI I D15 E13 J01 K05 =J8 0049-522
Alkyl-substd. cyclic alkylene tetramine(s) - 74814A/42
TABU/ 04.06.77 TABUSH I D15 E31 (E16) =J8 0049-882
Sepn. of ferric ion from aq. phase by contact with hydrophobic liq. - 12711B/07
*TABU/ 28.04.79 TABUS I A91 D15 J01 M25 *J5 5145-527
Macrocyclic hex:one heavy metal capturing agent - 03013D/03

TAKE

TAKE 25.02.67 TAKEDA CHEMICAL IND KK B04 D16 =DS 1667-923
ANTIBIOTIC B-2847 - 33598F/00
*TAKE 24.04.79 TAKEDA CHEMICAL IND KK B02 D16 *J5 5144-896
Cephalosporin antibiotic prodn. from Cephalosporium microorganism - 02913D/03
TAKG 16.02.76 TAKI CHEMICAL KK A14 D16 E16 (A35 A41 D15) =J8 0050-476
Bacterial treatment of acrylamide - 69900Y/39
TAKG 24.02.76 TAKI CHEMICAL KK A14 D16 E16 (A35 A41 D15) =J8 0050-477
Waste water acrylamide monomer removal - 71839Y/40
TANA 29.03.74 TANABE SEIYAKU KK B02 D16 =J8 0049-839
Antibiotic prodn. by culturing Streptomyces aerobically - 78090Y/44
*TDVC- 14.06.79 TDV CO D15 *US 4242-201
By/pass water softener system - 03589D/03
TEHE 02.05.79 TEIJIN HERCULES CHE KK A41 D13 E14 =J5 5145-637
High yield aromatic carboxylic acid prodn. - 82936C/47
TEIJ 22.05.78 TEIJIN KK A88 D15 J01 =US 4242-208
Semipermeable water-desalination membrane - 87961B/49
TEMO- 21.05.79 TEMOVA ETAB A83 D22 F07 S05 (X27) =NO 8001-495
Knitted therapeutic vest - 90551C/51
TENC 23.06.71 TENNECO INC A11 D17 G02 (A82) =J4 8016-925
Aq surface coating compsns contg hydroxyalkyl ether - 72164T/45
TENC 23.06.71 TENNECO INC A11 D17 G02 (A82) =J8 0049-637
Aq surface coating compsns contg hydroxyalkyl ether - 72164T/45
TERU- 05.03.79 TERUMO CORP D22 =SE 8007-664
Sterilisation of artificial organs - 71553C/40
*TESS/ 20.03.79 TESSIER M P C03 D16 *FR 2451-707
Hydrophonic culture of animal feed grains - 02673D/03
*TEXC 25.10.78 TEXACO DEV CORP D16 H04 (D13) *US 4242-458
Protein biosynthesis from methanol and ammonia - 03682D/03
*THOM/ 16.03.79 THOMAS R E D16 S05 *US 4242-462
Electrically self-sterilising inoculating loop - 03685D/03
THOR- 23.03.79 THORN SVENSKA AB D15 =FR 2451-717
Injecting gas esp. carbon di:oxide into water - 70008C/40
*TIEL- 19.06.79 TIELEMAN BV D12 *EP --21-553
Cutting vent of bird suspended from conveyor - 02405D/03
TOHK- 05.04.78 TOHKAI DENKA KOGYO B03 C02 D23 E13 =J8 0050-024
Pyrazine cpds. prepn. from diol and di:amine - 17120C/10
*TORA 04.05.79 TORAY IND INC A23 D25 E17 (A35 E14 E37) *J5 5145-737
Agent for cleaning appts. to which polyamide is adhered - 03097D/03
TOXN 27.04.79 TOYO JOZO KK A96 B04 D16 S03 (A14 A23 S05) =J5 5144-537
Simultaneous determn. of several analytes by enzymatic analysis - 25688C/15
TOXN 06.06.79 TOYO JOZO KK B04 D16 =GB 2051-079
Microbial glycero:kinase enzyme - 90461C/51
TOXN 26.08.80 TOYO JOZO KK B03 D16 #BE -884-925
Amino-glycoside antibiotics from dactylosporangium strain - 84718C/48
*TOXN 26.08.80 TOYO JOZO KK B04 D16 *BE -884-926
Glycerol kinase prepn. - 02036D/03
TOXP 15.05.76 TOYA SEYAKU KASEI A96 B05 D21 =J8 0049-564
Base compsn. for coating teeth - 02932A/02
TOYJ 27.04.76 TOYO SODA MFG KK A85 D15 J03 X25 (A91) =CA 1091-406
Fluorinated cation exchange resins - 83238Y/47
*TRAN= 08.12.78 TRANS CAUCASUS POUL C03 D13 *SU -733-618
Feed mixt. for young poultry - 03310D/03
TWEE- 16.09.78 TWEEDY OF BURNLEY D11 =EP --20-408
Dough mixing for farinaceous foodstuff prodn. - 27222C/15

UGIN 24.04.79 PROD CHIM UGINE KUH D25 E33 =GB 2051-024
Semi-continuous prodn. of zeolite type-A - 77063C/44
UNIC 15.10.74 UNION CARBIDE CORP A97 D12 =NL -165-772
Peelable tubular food casings - 65287W/39
UNIC 19.07.76 UNION CARBIDE CORP D12 =GB 1582-695
Fastening for gathered end of large sausage casing etc. - 06362A/04
UNIC 04.06.79 UNION CARBIDE CORP D12 T06 X25 =GB 2050-801
Machine to fill tubular sausage casings from collapsed concertina form - 90143C/51
UNIC 18.06.79 UNION CARBIDE CORP D15 #DE 2924-449
Nitrification-denitrification of waste-waters - 84034B/46
UNIC 26.06.79 UNION CARBIDE CORP D25 =EP --22-023
Zeolite agglomerate particles for detergent formulations - 84182C/47
*UNIC 26.06.79 UNION CARBIDE CORP A97 D25 E33 (E14) *EP --22-024
Zeolite-contg. agglomerate particles - 02614D/03
UNIL 24.08.73 UNILEVER NV D23 =NL -165-782
Refining edible glyceride-base oil by contact with adsorbent - 16427W/10
UNIL 08.12.78 UNILEVER NV D11 =DK 8003-179
Moulded wafer cone prepn. - 45084C/25
UNIL 06.04.79 UNILEVER NV D21 =BR 8002-028
Multicoloured extruded detergent bar - 90605C/51
UNIL 23.04.79 UNILEVER NV A96 D22 =J5 5146-153
Absorbent material for immobilising blood - 86808C/49
UNIL 11.05.79 UNILEVER NV D13 =BR 8002-932
Ice confectionery mouldings extraction - 84812C/48
UNIL 21.05.79 UNILEVER NV A87 D25 E19 F06 =NO 8001-494
Conc., aq. liq. fabric softeners - 86374C/49
*UNIL 30.05.79 UNILEVER NV D25 *GB 2051-117
Spray dried detergent powder contg. starch - 02774D/03
*UNIL 19.06.79 UNILEVER NV D23 E17 *EP --21-527
Selective hydrogenation of unsatd. fatty acids - 02392D/03
*UNIL 19.06.79 UNILEVER NV D23 E17 *EP --21-528
Selective hydrogenation of unsatd. fatty acids - 02393D/03
*UNIL 21.06.79 UNILEVER NV D25 E19 (E34) *BE -883-947
Aq. liq. detergent compsn. with active phosphate additive 02022D/03
*UNIL 27.06.79 UNILEVER LTD D25 E19 *EP --21-830
Low sudsing detergent compsns. - 02543D/03
UNIL 18.01.80 UNILEVER NV B04 D16 S03 (S05) =GB 2051-360
Determn. of proteinaceous specific binding agents - 56887C/32
UNOP- 12.12.78 UNO PLAST AS A96 D22 =EP --20-673
Absorbent restraining pad for esp. abdominal surgical ope 29221C/17
UNVO 19.04.76 UOP INC A88 D15 J01 (A26) #J8 0049-524
Composite semipermeable membrane for reverse osmosis - 760
UNVO 15.06.79 UOP INC A97 D17 J01 =NL 8003-422
Selective adsorption of components from an aq. soln. - 00288D/0
UPJO 19.03.79 UPJOHN CO B04 D16 =FR 2451-941
Pure plasmid DNA pUC3 - 72782C/41
*URAL= 05.07.77 URAL CHEM IND RES D22 E19 *SU -733-687
Bathroom and toilet deodorant compsn. - 03319D/03
*URBA= 23.03.79 URBAN ECONOMY RES D15 *FR 2451-892
Activated sludge treatment plant to purify waste water - 02691D/
*USBO 05.06.79 US BORAX & CHEM CORP D25 E37 (E14) *EP --21-
Dry carpet cleaning and deodorising compsn. - 02450D/03

VAND- 19.06.79 VANDEKERCKHOVE NV D14 (D23) =EP --21-507
Agitating boiler esp. for defibering palm fruit kernels - 05459C/04
VANG/ 16.11.78 VANGEDAL-NIELSEN E A97 D13 =EP --20-598
Disposable tea-bag with choice of tea filling for consumer - 23758
VEOS 28.06.77 VER OSTERR EISEN & STAHL D15 J02 =HU T019-23
Sewage aeration device - 02213B/02
*VEOS 28.06.79 VOEST-ALPINE AG D15 *EP --22-120
Breaking and working up fat and oil emulsion - 02667D/03
VICS 22.04.80 VICKERS LTD D22 S05 T06 =GB 2050-841
Enclosure for treatment of patients - 88661C/50
VIVO 14.02.68 MORTON-NORWICH PROD INC B05 D13 =NL -165
Synthetic food compositions contg amino acids - 39226F/00
*VIZU- 18.01.78 VIZUGYI TERVEZO D15 *HU T019-236
Process and appts. for treating water streams - D/03
*VLOC/ 22.08.79 VLOCK D G B04 D21 *US 4242-323
Synergistic anti:plaque oral hygiene compsns. - 03637D/03
*VOTE= 10.03.77 VORON TECH INST D13 *SU -734-266
Fruit pulp fermenter - 03419D/03
*VOTE= 09.11.77 VORON TECH INST D11 (D16) *SU -733-624
Bread kvass microbiological prodn. - 03314D/03
VYRM- 13.02.69 VYRMETODER AB D15 =NL -165-715
Removing iron from deep earth well water - 57365R/32

*WARN 11.06.79 WARNER-LAMBERT CO A96 D21 (A25) *US 4242-2
Bondable agar dental impression material - 03600D/03
WATE- 19.03.79 WATER REFINING CO D15 J01 =FR 2451-863
Convertible dual container storage system - 83195C/47
WEBS 17.10.72 WEBSTER E LTD D21 =J8 0049-975
Lipstick packing machine - 33050V/18
WELA 23.12.78 WELLA AG D21 E24 =DK 8003-173
Hair dye compsns. - 49737C/28
WELL- 21.05.76 WELLINGTON CHEM IND D22 E19 =GB 1582-731
Deodorising compsns. for chemical smells - 84665Y/48
WINT 21.03.79 WINTERSHALL AG D15 E19 H03 =FR 2451-893
Treatment of marine oil spills - 75420C/43
WITC 16.01.74 WITCO CHEM CORP A60 D15 E11 G03 =NL -165-65
Silicon contg. anti-foaming agent - 32497W/20
WMAC- 14.12.78 WEST STATES MACH CO D17 J01 =EP --20-738
Bearing suspension for basket centrifuge esp. sugar crystal sepa 29232C/17
*WYBE- 21.06.79 WYBERT GMBH B07 D21 E16 (B05) *DE 2925-020
Toothpick impregnated with anticariogenic agent - 02102D/03
*WYSS 28.05.79 ESCHER WYSS GMBH D15 *BR 8003-116
Decantation sludge mfr. - D/03
WYSS 28.05.79 ESCHER WYSS GMBH D15 J08 =BR 8003-119
Heat treatment of compacted or granulated material - 90388C/51

*XRAY= 12.01.78 X-RAY RES INST D16 J04 *SU -734-270
Device for fluorescent research into aq. biological samples - 03420

*YAKI/ 01.09.77 YAKIMETS V I D25 *SU -732-426
Intensifier filler for domestic fabric cleaners - 03286D/03

12.76 YAMANOUCHI PHARM KK B02 D16 #US 4242-449
oxy cephalosporins fermentative prodn. - 29215Y/17
4.79 YEDA RES & DEV CO LTD B04 D16 = J5 5144-898
on quantitative determn. in a medium - 79158C/45
05.79 YUHO SHOKAI KK D25 E17 G04 (E12) *J5 5145-799
semi-solid stain-removing compsn. - 03135D/03

2.77 ZH BISEIBUTSU KAGAKU KEN B03 D16 = US 4242-453
ine, an esterase inhibitor from Streptomyces - 42260A/24
5.79 ZH BISEIBUTSU KAGAKU KEN B03 D16 = J5 5145-697
in A,B,AO and BO are antibiotics - 82842C/47
04.79 ZENMI KK A96 D22 = J5 5146-154
ble sanitary napkin - 81183C/46
05.79 ZETA-ESPACIAL SA D13 = NO 8001-145
gasified sweets from a sugar syrup - 64232C/37

D
9 Q00+
5 R34
1 R45
9 S20
1 T03
1 T09
7 T43
3 D03+

D
3 Q00
3 R42
2 R44
6 T06
8 T34
8 U40
3 W41
0 X36
8 D03

BD
2 Q00
7 R12
4 R22
2 R45
8 R50
6 S37
1 T31
10 U44
23 Q01
94 Q01
08 D03

D
64 R32
08 R34
65 S33
33 T15
23 T51
88 A12
05 B32
37 B39
15 D03

DJ
53 R51+
60 D03+

DE
43 S22
60 S22
54 S23
16 T01
74 T30
63 T40
46 U39
67 V08
46 V20
84 D03

D
221 T07
517 T08
548 U45
902 V13
221 C35
537 D03

BDE
452 T07
327 T09
451 T10
959 T26
483 V03
337 V21
21 V25
22 V25
518 Y03
556 B17
451 B49
555 D03

33725-T DE
BE -775-152 T21
DE 2155-671 T22
J4 7010-371 T22
NL 7115-452 T22
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26 C48
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78 C04
07 D03

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19 C12+
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48 C16
64 C48
56 D03

DJ
89 C06+
056 C14+
971 D03

DJ
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893 C07+
025 D03

BCDE
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024 D03

ABCD
753 C13
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D
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BD
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012 C21+
443 C28+
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808 D03+

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GB 2050-831 D03

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D 03707-D BCDE
9 D03+ US 4242-503 D03

ABD
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D
9 D03+

D
1 D03

DE
6 D03

AD
9 D03

ADF
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